

SOCIAL INFLUENCE IN COLLECTIVE GOALS AND BRAND
PREFERENCES

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ABSTRACT

This three-essay dissertation extends previous research on social influence and examines social influence's impact on consumption, particularly in the contexts of collective goals and brand preferences. Essay 1 focuses on collective marketing campaigns, which are not shared equally by all customers. Two studies demonstrate that the framing of collective progress in such campaigns can broaden participation by highlighting the large area of progress toward the goal, emphasizing progress achieved for campaigns in their late stages and progress remaining in their early stages. Essay 2 examines the effects of brand age on consumer preferences and choices. Six studies demonstrate that consumers' preferences for younger brands increase with perceptions of product category innovativeness or the extent to which the product category is perceived to have evolved and is likely to evolve in the future. Findings reveal that younger (vs. established) brands are likely to be preferred when perceptions of product category innovativeness are high (vs. low). Essay 3 examines the effects of perceptions of product category innovativeness and consumer traits, such as novelty seeking and need for uniqueness, on consumers' preference for young versus established brands. This dissertation provides theoretical and managerial contributions.

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TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
ACKNOWLEDGMENTS	iii
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER	
1. INTRODUCTION	1
2. ESSAY 1: GETTING EVERYONE ONBOARD: FRAMING COLLECTIVE GOAL PROGRESS BROADENS PARTICIPATION IN COLLECTIVE MARKETING CAMPAIGNS	6
Literature Review and Hypotheses	8
Goal Pursuit	8
Progress Framing	9
Psychological Processes and Collective Goal Pursuits.....	11
Study 1: Collective Goal Near Completion	14
Study Design.....	14
Results and Discussion	17
Study 2: Collective Goal at Earlier Stages.....	21
Study Design.....	21
Results and Discussion	22
General Discussion	24

3. ESSAY 2: THE “ACHILLES HEEL” OF ESTABLISHED BRANDS: THE	
EFFECT OF BRAND AGE ON CONSUMERS’ BRAND CHOICE	31
Theoretical Background.....	35
Brand Age and Perceptions of Product Category Innovativeness	35
Age Stereotypes as Judgmental Heuristics	40
Reducing Reliance on Age Stereotypes	41
Study 1: Product Category Innovativeness and Brand Age.....	43
Method and Procedure	44
Results and Discussion	45
Study 2: Role of Brand Personality	49
Method and Procedure	49
Results.....	52
Checks.....	52
Brand Choice	52
Brand Personality.....	52
Mediating Role of Brand Personality	53
Discussion.....	54
Study 3: Controlling for Product Category.....	55
Method and Procedure	55
Results and Discussion	56
Checks.....	56
Brand Choice	56
Brand Personality.....	57

Study 4: Age Stereotypes as Judgmental Heuristics.....	58
Method and Procedure	58
Results and Discussion	60
Checks.....	60
Brand Choice	60
Brand Personality.....	63
Study 5: Role of Stereotype Inconsistent Information.....	64
Method and Procedure	65
Results.....	66
Checks.....	66
Brand Choice	67
Brand Personality.....	69
Discussion.....	70
Study 6: Stereotype Consistent Versus Inconsistent Taglines.....	71
Method and Procedure	72
Results and Discussion	73
Checks.....	73
Brand Choice	73
General Discussion	75
4. ESSAY 3: CONSUMERS’ NEED FOR UNIQUENESS AND THE DESIRE TO SEEK NOVELTY AS MODERATORS OF THE EFFECT OF BRAND AGE ON CONSUMERS’ BRAND CHOICE.....	82
Theoretical Background.....	85

Brand Age and Perceptions of Product Category Innovativeness	85
Consumers' Individual Traits	86
Need for Uniqueness.....	86
Desire to Seek Novelty	87
Study 1: The Mediating Role of Brand Personality Between Product Category Innovativeness and Brand Age and the Effects of Individual Traits	89
Method and Procedure	89
Results.....	92
Checks.....	92
Brand Choice	92
Brand Personality.....	93
Brand Choice and Individual Traits.....	93
Discussion.....	97
Study 2: Effects of Consumers' Need for Uniqueness on Brand Preference	98
Method and Procedure	98
Results.....	100
Checks.....	100
Brand Choice	100
Importance of Brand Personality	101
Discussion.....	102
General Discussion	103
REFERENCES	105

APPENDICES

A. ESSAY 1 STUDY 1: MEASUREMENT ITEMS	124
B. ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 1.....	125
C. ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 2.....	126
D. ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 3.....	127
E. ESSAY 2 STUDY 1: PRODUCT CATEGORIES AND BRAND AGE MANIPULATION	128
F. ESSAY 2 STUDY 1: REPRESENTATIVE STIMULUS – VIRTUAL REALITY HEADSET	129
G. ESSAY 2 STUDY 3: PRODUCT CATEGORY INNOVATIVENESS MANIPULATION.....	130
H. ESSAY 2 STUDY 4: PROCESSING SPEED MANIPULATION	131
I. ESSAY 2 STUDY 5: ENTITY AND INCREMENTAL IMPLICIT THEORY MANIPULATION AND BRAND TAGLINES.....	132
J. ESSAY 2 STUDY 6: STEREOTYPE CONSISTENT AND STEREOTYPE INCONSISTENT BRAND TAGLINES	133

LIST OF TABLES

Table	Page
1. Essay 2 Study 1: Preference for Younger Brand Across Product Categories.....	48
2. Essay 2 Study 2: Brand Personality Dimensions and Traits.....	51

LIST OF FIGURES

Figure	Page
1. Essay 1 Studies 1 and 2: Sample Description Participants Viewed, Accumulating Condition with Two Stamps.....	15
2. Essay 1 Studies 1 and 2: Examples of Stimuli for Study 1.....	15
3. Essay 1 Study 1: Results.....	18
4. Essay 1 Study 2: Results	24
5. Essay 2 Study 1: Brand Preference and Perceptions of Product Category Innovativeness.....	46
6. Essay 2 Study 4: Choice Proportion of Young Brand as a Function of Processing Speed.....	62
7. Essay 2 Study 5: Choice Proportion of Young Brand as a Function of Brand Taglines.....	69
8. Essay 2 Study 6: Choice Proportion of Young Brand as a Function of Brand Taglines.....	75
9. Essay 3 Study 1: Spotlight Analysis Result of CNFU.....	95
10. Essay 3 Study 1: Spotlight Analysis Result of the Desire to Seek Novelty.....	96

CHAPTER 1

INTRODUCTION

Other people's presence, thoughts, and behaviors can have a substantial effect on consumers' decision making. The literature on social influence – defined as changes in an individual's cognition, attitude, or behavior that originate from another person or group (French, Raven, and Cartwright 1959; Raven 1964) – demonstrates how social factors guide individual decision making (Bearden, Netemeyer, and Teel 1989). Earlier studies on social influence have focused on decision heuristics leading to *conformity* (Cialdini 2009; Cialdini and Goldstein 2004; Goldstein, Cialdini, and Griskevicius 2008; Huh, Vosgerau, and Morewedge 2014) or *nonconformity* (Imhoff and Erb 2009). These two aspects of social responses are defined as movement toward some norm or standard (i.e., conformity) and movement away from such a norm or standard (i.e., nonconformity) (Walker and Heyns 1962, p. 5). Prior research has focused on situational cues and internal drives that cause consumers to agree to conform or refuse to conform; for example, goal motivation (Fishbach, Steinmetz, and Tu 2016; Fishbach and Tu 2016), brand preferences (Chan, Berger, and Van Boven 2012; Morhart et al. 2015), product preferences (Berger and Heath 2007), grocery shopping (Argo, Dahl, and Manchanda 2005; McFerran et al. 2010), and communication behaviors (Brown and Reingen 1987).

This three-essay dissertation extends the previous research on social influence and examines the impact of social influence on consumption, particularly in the contexts of collective goals and brand preferences. The first essay focuses on increasing motivation to fulfill one's social needs (e.g., the perceived impact of participation and feelings of

helping the community) as a factor in consumers' pursuit of goals. The second essay argues that consumers rely on age stereotypes (widely held beliefs about age and human characteristics) to form distinct impressions about brand personality, which then influence their brand preference. The third essay highlights the effects of perceptions of product category innovativeness and consumer traits, such as novelty seeking and the need for uniqueness, on consumers' preferences. This dissertation provides theoretical and managerial contributions to research on social influence and brand preferences.

Essay 1 focuses on collective marketing campaigns, which are not shared equally by all customers. For such campaigns, how can marketers encourage broad participation? The present research demonstrates that the framing of collective progress in such campaigns can broaden participation by highlighting the "large area" of progress toward the goal, emphasizing progress achieved for campaigns in their late stages and progress remaining in their early stages. Two studies test this large area hypothesis in the context of a waste reduction drive, examining the reactions of Republicans and Democrats who might be more or less inclined to support the drive respectively. Study 1 examines these processes when the drive was nearing completion, finding that an accumulating frame (focusing on progress achieved) increases motivation to participate for Republicans to levels comparable with Democrats. Study 2 evaluates these processes at earlier stages in the drive's progress. In these circumstances, a remaining frame (focusing on contributions still needed) increases motivation to participate among Republicans to a similar level as Democrats. These findings indicate framings that highlight the large area in collective progress broaden participation in collective marketing campaigns. In other words, findings in this research suggest that marketers should highlight the remaining

contributions needed early on and accumulated contributions received later in collective marketing campaigns.

Essay 2 examines the effects of brand age on consumer preferences and choice. Given that much of the earlier literature on these topics can be characterized as suggesting that *old is gold*, we take a contingent perspective to identify conditions under which a younger brand may be preferred over an established brand. Six studies demonstrate that consumers' preferences for younger brands increase with perceptions of product category innovativeness or the extent to which the product category is perceived to have evolved and is likely to evolve in the future. Consumers rely on age stereotypes to form distinct brand personality impressions, and the extent to which these impressions match the characteristics associated with product categories perceived to be innovative influences brand preferences. Younger (vs. established) brands are thus likely to be preferred when perceptions of product category innovativeness are high (vs. low). Further, age stereotypes are more likely to be relied upon as a decision heuristic when decisions are made quickly and effortlessly. Finally, the malleability of age stereotypes is highlighted by demonstrating that providing stereotype inconsistent taglines attenuate the relationship between preference for younger brands and perceptions of product category innovativeness. Together, the findings support our conceptual reasoning and have theoretical and managerial implications.

Essay 3 examines how (1) consumers' perceptions of product category innovativeness and (2) consumer traits such as novelty seeking and the need for uniqueness affect consumers' preference for young versus established brands. Although perceptions of product category innovativeness have a positive impact on consumer

preference for young brands, this effect is moderated by novelty seeking and the need for uniqueness. The findings reveal that both consumers who seek novelty and consumers with a high need for uniqueness tend to prefer young brands, regardless of perceptions of product category innovativeness. However, consumers who do not seek novelty and consumers who have a low need for uniqueness tend to prefer young brands when perceptions of product category innovativeness are high and established brands when perceptions of product category innovativeness are low.

This dissertation provides theoretical and managerial contributions to the social influence literature. First, the findings extend prior research on social influence and contribute to our understanding of consumers' responses to participation in collective goals and consumers' interactions with brands. Essay 1 demonstrates that framing information about other people's actions shapes motivation to participate in a collective marketing campaign. Highlighting the remaining progress needed earlier in a campaign and accumulated progress achieved later in a campaign broadens its appeal to consumers who might otherwise have been unlikely to share the campaign's goal. Perceptions of goal desirability, the impact of one's contributions, and feelings of helping appear to underlie this broadened motivation. These findings can inform both marketers and policymakers seeking to conduct successful collective campaigns.

Second, my dissertation extends previous research on the effects of brand attributes on brand image. Essay 2 demonstrates that consumer preferences for a relatively young brand increase with their perceptions of product category innovativeness. These findings shed insight into the underlying process by suggesting

that consumers rely on age stereotypes to form brand personality impressions based on brand age.

Third, my dissertation contributes to previous literature on consumers' individual traits, the need for uniqueness and desire to seek novelty. Previous research has shown that consumers make distinctive choices or creative performances associated with the need for uniqueness and desire to seek novelty (Cheema and Kaikati 2010; Gocłowska et al. 2019; Moldovan, Steinhart, and Ofen 2015). Findings in my dissertation extend previous research by showing that the relationship between perceptions of product category innovativeness and young brand preference differs according to consumers' individual traits, consumers' need for uniqueness and desire to seek novelty.

My dissertation has important practical implications for brands orchestrating collective marketing campaigns. First, the findings demonstrate that the framing of collective progress broadens participation in collective marketing campaigns. The current results suggest that the framing of information may be used to avoid alienating consumers that are less likely to support the political attitudes incorporated into the advertising campaigns.

Second, this research identifies the conditions under which an established brand is preferred and when a younger brand is preferred. Findings suggest strategies for competing against other brands which are contingent on perceptions of product category innovativeness. Brand managers should consider individual traits when they emphasize and actively communicate a modern, innovative, and trendy image.

CHAPTER 2

ESSAY 1: GETTING EVERYONE ONBOARD: FRAMING COLLECTIVE GOAL PROGRESS BROADENS PARTICIPATION IN COLLECTIVE MARKETING CAMPAIGNS

When conducting a collective campaign such as a fundraiser or a donation drive, campaigners often create a graphical measure, like a thermometer, to publicly track contributions. The first thermometer to be used as a campaign tracker was for a 1905 YMCA fundraiser that raised \$4 million in less than one month (Cutlip 1965). Similar or identical graphical trackers are ubiquitous in contemporary marketing campaigns and have been used on crowdfunding sites as well as when gathering signatures for a petition.

While this approach is effective when the goals are shared among all participants, it remains unclear whether the same is true when participants are less likely to share a collective goal equally. For example, fundraising for the local police department might face skepticism from the Black Lives Matter community and a campaign to reduce a business's carbon footprint might meet resistance from climate change skeptics. Previous research has investigated how information about progress towards achieving a goal can motivate behavior in individual goal pursuit (Koo and Fishbach 2008; Robinson et al. 2012; Huang et al. 2014) or collective goal pursuit (Fishbach et al. 2011; Cryder et al. 2013; Fishbach and Tu 2016). Recent literature showed that prosocial choice is driven by a generalized morality preference for doing the right thing (Capraro and Rand 2018; Tappin and Capraro 2018), which is effective when it is perceived as a norm (Capraro et al. 2019) and framed socially (Capraro and Vanzo 2019). Other psychological processes

likely shape goal pursuit when not everyone is committed to the collective goal, and in such circumstances, there may be more effective methods of promoting participation. Furthermore, does one's reaction toward others' contributions change in the early versus late stages of progress? How do others' actions influence individuals' participation toward a collective goal?

To address this issue, the current paper investigated how the presentation of campaign progress affects broad participation in a collective marketing campaign when a subset of consumers are less likely to support the goal. In recent years, Americans have become more polarized based on political identity, with ramifications for a range of consumer preferences including brand preferences (Khan et al. 2013), varied tastes (Carney et al. 2008), in-group conformity, and sustainable consumption behaviors (Kidwell et al. 2013). The research context of our paper was an environmentally-friendly waste reduction drive where some people are more supportive and some people are less supportive to the goal. We analyzed participation based on political party affiliation. We expected that Democratic participants would be more likely to share the drive's goal and thus be more motivated to donate, while Republican participants would be less likely to share the drive's goal and thus less motivated to donate.

Findings revealed that highlighting the larger area of the progress bar tracking collective contributions had the effect of broadening participation in the campaign by motivating Republicans to levels of participation similar to Democrats, who despite not necessarily sharing the drive's goal remained sensitive to the framing of collective progress. This broader participation arises due to goal desirability, perceptions of the impact of one's participation, and desire to help the community. These findings enrich

theories of goal pursuit in the social domain and indicate that marketers can broaden participation in collective marketing campaigns by highlighting the larger area of progress bars used to track contributions.

We first provide a theoretical background of the psychological processes underlying goal pursuit and articulate our hypotheses regarding collective goals that are not shared by all consumers. We then report the results from two experiments testing these hypotheses and discuss the theoretical contributions of this work as well as the managerial implications.

Literature Review and Hypotheses

Goal Pursuit

Prior literature has highlighted two fundamental components of goal pursuit: goal commitment and goal progress (Fishbach and Dhar 2005; Koo and Fishbach 2008; Bonezzi et al. 2011; Cryder et al. 2013). Goal commitment refers to a person's attachment to or determination to reach a goal (Hollenbeck and Klein 1987; Locke et al. 1988; Brunstein 1993; Velasco Moreno et al. 2019). Empirical studies demonstrate that commitment increases motivation (Koo and Fishbach 2008), promoting goal-consistent actions early in goal-pursuit (Fishbach and Dhar 2005; Zhang and Huang 2010). However, it remains unclear whether one's motivation toward pursuing a collective goal with others can be increased if the goal is not equally shared by everyone.

In contrast, goal progress refers to the concrete progress made toward achieving a goal (Koo and Fishbach 2008). Typically, people's efforts toward goal pursuit increase with proximity to achieving the goal (Hull 1932; Kivetz et al. 2006), referred to as the goal-gradient effect. For example, in the context of customer loyalty programs, customers

make more purchases as they approach loyalty rewards goals, and this increased motivation is linked to perceptions of the perceived impact of each action (Kivetz et al. 2006). In the context of collective goals, people are more likely to participate in the later stages of progress (Cryder et al. 2013). However, it is unclear whether similar processes shape motivation when collective goals are not shared by all.

Progress Framing

Research in judgment and decision making shows that perceptions are sensitive to relative comparisons (Kahneman and Frederick 2002). By highlighting relative actions, goal progress can be framed as to-date (i.e., accumulating) or to-go (i.e., remaining, Koo and Fishbach 2008). In individual goal pursuit, the accumulating goal progress frame is typically more motivating than the remaining progress frame when the goal progress is low while the remaining frame is typically more motivating than the accumulating frame when goal progress is high (Koo and Fishbach 2012). Essentially, if portraying progress graphically, one would prefer to highlight the small area of the progress bar in individual goal pursuit (emphasizing progress achieved early and progress remaining later in goal pursuit). There is some evidence, however, that different processes may shape behavior with collective goal pursuit. Prior work has shown that people who are less likely to respond to a fundraising request due to lack of prior participation are more motivated to participate in later stages of fundraising when accumulated progress is emphasized (Koo and Fishbach 2008). The present work builds on this initial finding by examining controversial goals where some participants may be ambivalent about or antagonistic toward the collective goal. Furthermore, we examine what underlying processes may guide motivation to participate in this context. Building on these earlier findings, we

anticipate that highlighting the larger area of collective goal progress may broaden overall participation when social goals are not universal. Near the completion of the drive, underscoring accumulated progress serves as a signal of others' commitment, evoking social norms to encourage participation by additional consumers (Goldstein et al. 2008) and supplementing the commitment of those who might not otherwise share the goal. By highlighting others' actions, emphasizing progress-to-date also serves as a reminder of what others are likely to do. With prosocial campaigns and collective endeavors, this intervention may share roots with moral nudges, which have been shown to motivate prosocial behavior (Tappin and Capraro 2018; Capraro and Vanzo 2019) and increase charitable donations (Capraro et al. 2019) and decrease tax evasion (Bott et al. 2017). However, highlighting the remaining progress signals a low need for progress, which may not spur engagement. At the same time, we anticipate that there will be a ceiling effect for those who are already motivated to participate in the collective drive, and that progress framing will thus have a minimal effect. We therefore predict that:

H1: Those who share the collective campaign's goal will be motivated to participate in the drive regardless of progress framing.

H2: In the end stages of collective campaigns, highlighting the large area (accumulated progress) will increase motivation to participate among those who are less likely to share the campaign's goal to levels similar to those who are more likely to share the campaign's goal.

On the other hand, at the beginning stages of a collective campaign, when overall motivation is often low (Koo and Fishbach, 2012), we predict that the processes underlying motivation to participate will differ. Contrary to the positive impact that the

accumulating frame has on motivation when progress is high during the later stages of a campaign, the accumulating frame in the early stage can suggest low commitment made by others thus far. Highlighting progress to date can therefore be demotivating when collective progress is low during the early stages of a campaign, particularly for those who are less likely to share the goal of the drive. Instead, we predict that the remaining frame would increase motivation among those who are less likely to share the goal by signaling the need for progress. As a result, a large area in the progress bar may broaden overall participation when social goals are not universal. Thus, we expect that:

H3: During the early stages of a collective campaign, the large area (remaining frame) will increase motivation to participate among those who are less likely to share the goal to levels similar to those who are more likely to share the campaign's goal.

Psychological Processes and Collective Goal Pursuits

As outlined earlier, we posit that three psychological processes underlie the broadened participation observed when an accumulating progress frame is employed near goal completion: perceived goal desirability, perceived impact of participation, and feelings of helping the community. First, observing others' high overall participation leads to judgments that the goal is desirable to pursue. Desirability refers to the value of the end state of an action (Liu, 2008). Particularly when pursuing goals with others, high levels of participation by others signal a social norm that this action is desirable, thus encouraging others to also pursue the goal (Goldstein et al. 2008). In effect, observing others' participation signals a social goal commitment, which can supplement one's own

low individual commitment to the drive's goal and spur participation. Thus, we anticipate:

H4: As a collective campaign nears completion, the accumulating frame motivates participation among those who are less likely to share a collective goal by enhancing the perceived desirability of the drive's goal.

Second, perceptions of the impact of one's actions also likely increase motivation to participate in collective campaigns as they near completion. The perceived impact of one's participation increases as greater progress is made toward achieving the goal (Cryder et al. 2013), and people are more likely to contribute to a collective goal when their actions have a greater impact (Sen et al. 2001; Kivetz et al. 2006; Fishbach and Tu, 2016). We therefore hypothesize:

H5: As a collective campaign nears completion, the accumulating frame motivates participation among those who are less likely to share a collective goal by enhancing their perceptions of the impact of their participation.

Third, increasing participation by others in a collective campaign signals that the goal is shared by the general community, thus increasing perceptions that one's participation would contribute to the community. Research across multiple domains of consumption (e.g., Crane, 2001; Mazar and Zhong, 2010; Olson et al. 2016) suggests that such feelings of helping can spur diverse prosocial behavior. These feelings of helping the community increase moral obligation, in turn promoting prosocial behaviors (De Groot and Steg, 2009). Thus, we propose:

H6: As a collective campaign nears completion, the accumulating frame motivates participation among those who are less likely to share a collective goal by enhancing their feelings of helping the community.

We conducted two studies to test our hypotheses in the context of an environmentally-friendly waste reduction drive. Consumer attitudes toward pro-environmental initiatives have been found to vary based on political party affiliation (Jost et al. 2003; Dunlap and McCright 2008; Feygina et al. 2010; Kidwell et al. 2013), so given the marketing and policy ramifications of political attitudes (Ordabayeva and Fernandes 2018), we used political party affiliation as a proxy of different levels of support toward environmentally-friendly campaigns. By using political party affiliation to operationalize support for the collective goal, this research approach avoided potential issues arising from attempting to measure participants' support for the goal in advance, such as potentially priming responses or evoking experimenter demand. Moreover, as political polarization among consumers in the United States continues to grow (Haidt and Graham 2007; Winterich et al. 2012; Talhelm et al. 2015), it is important to understand how such divides shape consumer behavior.

Study 1 examined how progress framing alters motivation to participate as the drive nears completion, while Study 2 examined the drive in its early stages. Taken together, these experiments investigate how framing collective progress can broaden participation in such drives, examining the psychological processes that shape willingness to participate among those who are more or less likely to support the goals of a collective marketing campaign.

Study 1: Collective Goal Near Completion

Study 1 examined people's motivation to participate in a waste reduction drive as it neared completion. This campaign used collective progress to highlight either accumulating progress achieved or remaining progress necessary. While we anticipated Democrats' motivation would be high regardless of framing given the alignment between party environmental attitudes and the waste reduction drive, we expected Republicans' motivation would depend upon the framing of collective progress, with accumulating frames promoting participation.

Study Design

Three hundred seventy-nine participants (183 female, $M_{\text{age}} = 36.1$, $SD = 18.8$) were recruited from Amazon Mechanical Turk for an online experiment. Participants were based in the United States with an approval rate of at least 97% on Amazon Mechanical Turk having completed at least 100 HITs. Participants were instructed to imagine they received an incomplete loyalty card for a local café from a friend who was moving away from the area (revised from Koo and Fishbach, 2012). The loyalty card included information about an environmentally-friendly waste reduction drive the café was conducting, with the goal of saving 10,000 disposable cups from the landfill by asking customers to bring their own reusable mugs (see Figures 1 and 2). Each purchase using one's own mug instead of using a disposable coffee cup saved one cup from the landfill and earned a stamp on the loyalty card. A completed reward card (10 stamps) could be exchanged for a free beverage at the café. The waste reduction drive's progress was monitored using a thermometer displayed on the point-of-sale device.

Imagine that your friend recently moved away from the city where you live. Before they left, they gave you their partially completed reward card from a local cafe, which is shown below. This cafe is committed to decreasing its carbon footprint and reducing the amount of waste it produces. They have started a Waste Reduction Drive to eliminate 500 pounds of waste from landfills, the equivalent of around 10,000 disposable cups. You can participate in the project and help the cafe reach its goal by bringing your own mug to the cafe 10 times (helping eliminate around ½ pound of waste). Once you complete the reward card (bringing your own mug 10 times), you receive one free beverage as a reward. The reward card from your friend already has credit for bringing a mug two times. Green Café tracks participation in the Waste Reduction Drive in real time. The Drive has saved 8,500 cups from the landfill.

Figure 1. Essay 1 Studies 1 and 2: Sample Description Participants Viewed, Accumulating Condition with Two Stamps

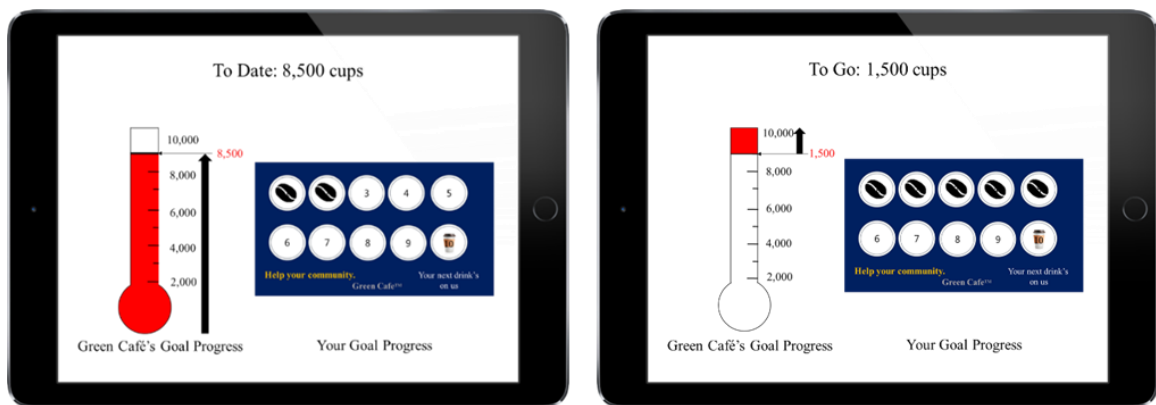


Figure 2. Essay 1 Studies 1 and 2: Examples of Stimuli for Study 1

Study 1 tested a 2 (individual progress: two-stamp vs. five-stamp) \times 2 (frame of collective progress: accumulating vs. remaining) \times 2 (political affiliation: Republican vs. Democrat) interaction effect on the motivation of participation in a collective goal. While the overall amount of collective progress was identical in all conditions, the framing of collective progress was manipulated to highlight either accumulating progress (i.e., 8,500 cups saved to-date) or remaining progress (i.e., 1,500 cups to-go). To ensure that the effects of collective progress framing generalized across different levels of individual progress, we also manipulated the number of existing stamps on the loyalty card (2 or 5

stamps for low or high progress, respectively). We asked an attention check question on a seven-point scale, “If you are paying attention to this survey, select the second button.” It was a single-choice question and participants were not forced to respond. There is a one seventh (14.3%) chance that a participant inadvertently passes the question. Forty-eight participants answered this question incorrectly and were removed from all analyses. To avoid priming identities, political party affiliation was measured at the end of the survey. As political party affiliation was used to infer predispositions toward the environmentally-friendly goal, data were analyzed only from participants who identified as Republican or Democrat ($n = 264$, 80 Republicans, 184 Democrats).

After reviewing the loyalty card, participants were asked to answer several questions on seven-point scales. They rated how likely they would be to use the reward card (i.e., “How likely is it that you would visit Green Café and use the reward card?”, 1 = Definitely would not, 7 = Definitely would) and the extent to which they felt Green Café’s goal to decrease waste was desirable (i.e., “Is Green Café’s goal to decrease waste desirable?”, 1 = Strongly disagree, 7 = Strongly agree). Participants also responded to a six-item scale survey regarding the perceived impact of their participation by evaluating the extent to which getting one stamp makes progress towards reducing waste (e.g., “To what extent does getting one stamp make you feel that you are making progress toward getting one free drink?”, 1=Not at all, 7=Very much; $\alpha = .90$). They also rated how much they felt participating would help their community (i.e., “To what extent does getting one stamp make you feel that you are helping your community?”, 1=Not at all, 7=Very much). To confirm that the framing of collective progress did not change perceptions that the waste reduction drive would be successful, participants completed a three-item scale

of the campaign's likelihood of success (e.g., "To what extent do you trust Green Café to efficiently reduce its waste?"), 1 = Not at all, 7 = Very much; $a = .76$; see Appendix A).

Results and Discussion

Ratings of the desirability of the goal of the waste reduction drive were analyzed using an ANOVA with the between-subjects factors of collective progress framing (accumulating or remaining), individual progress (2 or 5 stamps), and political affiliation (Republican or Democrat). Democrats rated the goal as more desirable ($M = 6.7$) than Republicans ($M = 6.1$, $F(1, 256) = 19.86$, $p < .001$), as expected. The interaction between individual progress and political affiliation was also significant ($F(1, 256) = 3.88$, $p = .050$). Additionally, we found that there was a larger difference between Democrats and Republicans when the loyalty card already had two stamps ($M_{\text{Dem}} = 6.7$, $SD = 0.59$ vs. $M_{\text{Rep}} = 5.8$, $SD = 1.82$; Welch's $t(34.3) = 2.87$, $p = .007$) than when it had five stamps ($M_{\text{Dem}} = 6.6$, $SD = 0.62$ vs. $M_{\text{Rep}} = 6.3$, $SD = 1.16$; Welch's $t(61) = 1.76$, $p = .083$). Importantly, the analyses yielded the predicted interaction between progress framing and political affiliation ($F(1, 256) = 7.67$, $p = .006$; see Figure 3). As expected, in the remaining frame condition, Democrats rated the café's waste reduction goal as more desirable ($M = 6.7$, $SD = 0.52$) than Republicans ($M = 5.8$, $SD = 0.68$; Welch's $t(46.9) = 3.54$, $p = .001$). This is the typically expected pattern, as Democrats are generally more supportive of environmentally-friendly efforts than Republicans. However, in the accumulating frame condition, both Democrats and Republicans rated the goal as similarly desirable ($M_{\text{Dem}} = 6.6$, $SD = 0.68$ vs. $M_{\text{Rep}} = 6.4$, $SD = 1.16$; Welch's $t(45.1) = 0.95$, $p = .349$), supporting Hypothesis 2. The accumulating frame enhanced Republicans' evaluation of the desirability of waste reduction, causing them to perceive the waste

reduction goal as favorably as Democrats did. No other effects or interactions were significant.

Building on these findings, we next examined the extent to which participating in the drive made one feel as if they were contributing to the drive's success. Ratings of the perceived impact of participation were submitted to the same between-subjects ANOVA used to examine effects on perceptions of the drive's desirability. Supporting Hypotheses 1 and 2, the results revealed a significant interaction between progress framing and political affiliation ($F(1, 256) = 5.38, p = .021$; see Figure 3). Democrats rated the perceived impact of their participation similarly regardless of frame ($M_{accumulating} = 4.6, SD = 1.14$ vs. $M_{remaining} = 4.7, SD = 1.28; t(182) = 0.67, p = .501$), whereas Republicans rated the perceived impact greater in the accumulating frame ($M = 5.1, SD = 1.13$) compared to the remaining frame ($M = 4.4, SD = 1.53; Welch's t(77.3) = 2.26, p = .027$). No other effects or interactions were significant. These results indicate that the accumulating frame is more effective at enhancing Republicans' judgments of the impact of their participation, consistent with our hypotheses.

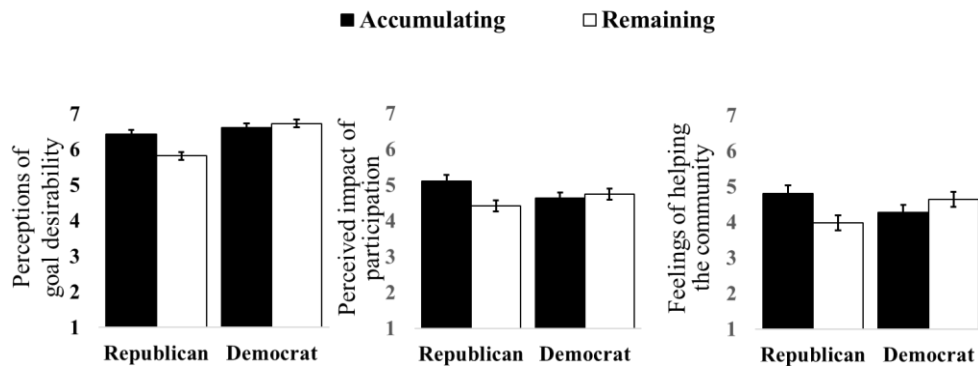


Figure 3. Essay 1 Study 1: Results

Third, we conducted a similar analysis examining participants' ratings of the extent to which participating made them feel they were helping their community. In alignment with our other analyses, the interaction between collective progress framing and political affiliation was significant ($F(1, 256) = 6.75, p = .010$; see Figure 3). Democrats' feelings of helping the community did not significantly vary with collective progress framing ($M_{accumulating} = 4.3, SD = 1.58$ vs. $M_{remaining} = 4.6, SD = 1.67$; $t(182) = 1.51, p = .134$), while Republicans reported marginally greater feelings of helping in the accumulating frame ($M = 4.8, SD = 1.70$) than in the remaining frame ($M = 4.0, SD = 2.09$; $t(78) = 1.92, p = .059$). No other effects or interactions were significant. These findings are consistent with our hypotheses that the accumulating frame would boost judgments regarding the collective appeal of the waste reduction drive and engender a social norm to participate, therein enhancing Republicans' judgments of the drive.

Our initial analyses revealed that the accumulating frame of collective progress enhanced Republicans' perceptions of the goals of the drive, their judgment of the impact of their participation, and their feelings that participating would help their community. However, it is possible that the accumulating frame changed perceptions that the drive would be successful. To address this potential explanation for the results, we analyzed ratings of the likelihood that the waste reduction drive would be successful. Importantly, the drive's perceived success did not differ based on the framing of collective progress ($M_{accumulating} = 5.6$ vs. $M_{remaining} = 5.5, F(1, 262) = 0.35, p = .554$), consistent with previous research (Koo and Fishbach, 2012). These results indicate differences in the perceived success of the drive cannot account for the key findings observed here.

We next sought to test whether perceptions of the desirability of the drive's goal, judgments of the impact of participation, and feelings of helping the community mediate the effect of collective framing progress on participation in the drive for Republicans (Hayes 2013, model 7). A moderated mediation model revealed that Republicans decrease their willingness to use a reward card in the remaining compared to the accumulating frame (95% CI: -0.66 and -0.02) and that this decrease is mediated by changes in perceived desirability of the drive's goal, while this effect is not observed for Democrats (95% CI: -0.03 and 0.22), supporting Hypothesis 4 (see Appendix B). As the direct effect of framing on willingness to use the reward card was not significant ($\beta = -0.02$, $p = .923$), this finding indicates an indirect-only mediation (Zhao et al. 2010). In short, the accumulating frame increases the willingness to use the reward card by increasing the perceived desirability of the goal. Similar results were found in models examining the perceived impact of participation (Republican 95% CI: -0.86 and -0.07 ; Democrat 95% CI: -0.16 and 0.30) and feelings of helping the community (Republican 95% CI: -0.76 and -0.01 ; Democrat 95% CI: -0.04 and 0.37). These findings support Hypotheses 5 and 6 respectively (see Appendices C and D).

By entering all of the three measures as simultaneous mediators in the moderated mediation model, we found that the perceived desirability of the goal (index: 0.24 , 95% CI: 0.01 and 0.48) and the perceived impact of participation (index: 0.38 , 95% CI: 0.05 and 0.79) mediate the effect of progress framing on participation. The 95% CI obtained for the index of moderated mediation of feelings of helping (-0.11 and 0.33) included zero, which suggests that the indirect effect was absent when the three mediators were tested together. Thus, Republican participants were more likely to participate in the

accumulating frame due to increased perceived desirability of the drive's goal and a higher perceived impact of their participation.

Study 2: Collective Goal at Earlier Stages

In Study 1, we found that the accumulating frame of collective progress increases Republicans' motivation to participate by enhancing the desirability of the goal, the perceived impact of participation, and feelings of helping the community. However, it remains unclear whether similar effects would emerge for collective goals at earlier stages, with lower amounts of accumulated progress. This is particularly important from a managerial perspective, as marketers often desire to boost participation for new campaigns. Therefore, Study 2 tests Hypothesis 3 by examining how progress framing shapes participation and perceptions of the brand conducting the drive when the waste reduction drive is at earlier stages of progress.

Study Design

Three hundred eighty-five US participants (176 female, $M_{\text{age}} = 37.0$, $SD = 12.1$) were recruited through Amazon Mechanical Turk and randomly assigned to one of four conditions in a 2 (frame of collective progress: accumulating or remaining) \times 2 (progress of collective goal: 1,500 cups or 5,000 cups) design. As individual progress did not interact with our key findings from Study 1, in this experiment, we did not manipulate individual progress and all participants viewed a reward card with three stamps. Participants were based in the United States with an approval rate of at least 97% on Amazon Mechanical Turk having completed at least 100 HITs, and participants who had completed our previous study were excluded from participation. We asked participants to

answer the same attention check question used in Study 1. Fifty-nine participants, who did not pass the attention check were removed from all analyses.

Participants followed the same procedure of Study 1. After learning about the waste reduction drive, participants rated their motivation to participate the drive, how long it would take them to complete the reward card, brand liking (e.g., “I like the brand Green Café”, 1 = Strongly disagree, 7 = Strongly agree; $\alpha = .92$), and feelings of helping the environment (i.e., “To what extent does getting one stamp make you feel that you are helping the environment?”, 1 = Not at all, 7 = Very much). As in Study 1, participants completed a three-item scale of the campaign’s likelihood of success ($\alpha = .80$; see Appendix A). At the end of the survey, participants reported their political affiliation and only responses from Republicans or Democrats were analyzed ($n = 257$, 86 Republicans, 171 Democrats).

Results and Discussion

Ratings of the intention to participate in the drive and bring one’s own mug to the café were analyzed using an ANOVA with the between-subjects factors of collective progress framing (accumulating or remaining), drive stage (1,500 or 5,000 cups saved), and political affiliation (Republican or Democrat). Analyses revealed a marginally significant interaction between framing and political affiliation on one’s motivation to participate in the drive ($F(1, 249) = 3.55, p = .061$). As expected, Democrats’ intentions to participate ($M = 6.3, SD = 1.01$) were higher than Republicans’ in the accumulating frame ($M = 5.6, SD = 1.67$; Welch’s $t(66) = 2.54, p = .013$) but did not differ in the remaining frame ($M_{Rep} = 6.0, SD = 1.50$ vs. $M_{Dem} = 6.0, SD = 1.61$; $t(136) = 0.02, p = .987$), supporting Hypothesis 3. No other main effects or interactions were significant. In

sum, when overall participation is low, Democrats remain consistently motivated to participate in the goal. However, the remaining frame promoted Republicans' willingness to participate in the campaign, such that their indicated willingness to participate did not differ from Democrats'.

We next examined ratings of brand liking using a similar ANOVA. There was a marginally significant main effect of political affiliation, as Democrats evaluated the brand more favorably ($M = 5.4$) than Republicans ($M = 5.1$, $F(1, 249) = 3.63$, $p = .058$). The interaction between collective progress framing and political affiliation was significant ($F(1, 249) = 4.66$, $p = .032$; see Figure 4). As expected, Democrats evaluated the brand more favorably ($M = 5.6$, $SD = 1.03$) than Republicans in the accumulating frame ($M = 4.9$, $SD = 1.36$; Welch's $t(76.9) = 2.87$, $p = .005$). However, in the remaining frame, participants rated the brand favorably regardless of political affiliation ($M_{Dem} = 5.3$, $SD = 1.31$ vs. $M_{Rep} = 5.2$, $SD = 1.41$; $t(136) = 0.30$, $p = .767$). No other main effects or interactions were significant. The interaction reveals attitudes toward the brand are favorable in the remaining frame across political affiliations, whereas only Democrats liked the brand in the accumulating frame. Similar results were found examining feelings of helping the environment using the same ANOVA approach. There was a marginally significant interaction between collective progress frame and political affiliation ($F(1, 249) = 3.65$, $p = .057$; see Figure 4). These findings are consistent with our hypotheses that the remaining frame would boost evaluation regarding the collective appeal of the waste reduction drive and engender social norms to participate, therein enhancing Republicans' evaluation of the drive. Importantly, as with Study 1, these findings were not driven by differences in judgments that the drive would be successful, as ratings

regarding the drive’s likely success again did not differ based on progress framing ($M_{accumulating} = 5.3$ vs. $M_{remaining} = 5.4$, $F(1, 255) = 0.13$, $p = .714$). In sum, the remaining frame increased Republicans’ feelings of helping the environment, whereas the goal framing did not change Democrats’ feelings.

To summarize, findings from Study 2 support the large area hypothesis. When highlighting the remaining progress needed, which is a larger area in the progress bar, Republicans rated the brand as favorably as Democrats and reported similar feelings of helping the environment if they participated. Overall, the remaining frame was most effective for broadening support for these earlier stage drives.

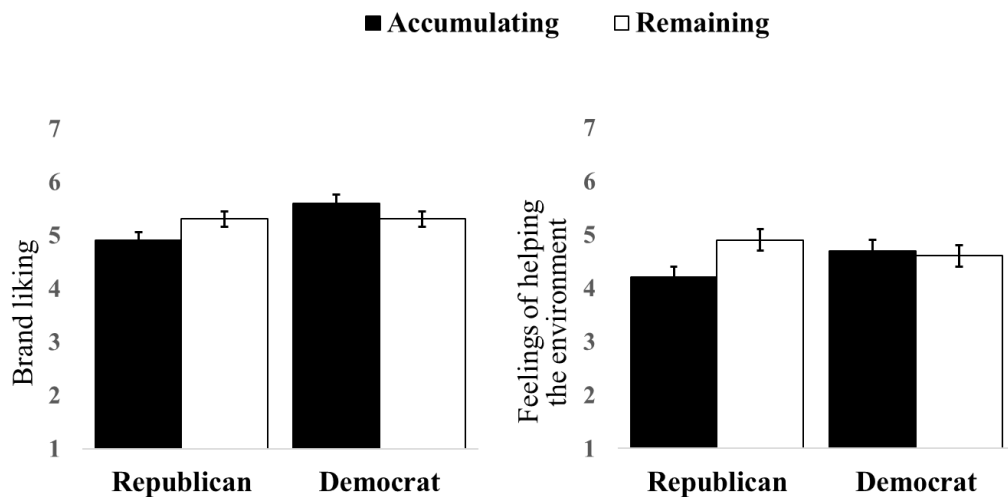


Figure 4. Essay 1 Study 2: Results

General Discussion

The present research examines how framing collective campaign progress affects participation in a marketing campaign. In the context of a waste reduction drive, we find that Democrats’ interest in participating is generally high regardless of how collective progress toward achieving the goal is framed. However, Republicans are sensitive to

collective progress framing. Overall, framing feedback about collective goal progress to signal information of the large contributions made by others at the end stage and the large need for progress at the beginning stage of a campaign served to broaden participation. Near the end of the campaign, this large area effect was mediated by changes in Republican participants' perceptions of goal desirability, the impact of their participation, and feelings of helping.

The current research expands understanding of the social processes influencing collective goal pursuit. Previous studies have typically focused on non-controversial social goals, such as donations to charities that most consumers would support (Koo and Fishbach 2008; Bonezzi et al. 2011; Fishbach et al. 2011; Cryder et al. 2013; Fishbach et al. 2016; Fishbach and Tu, 2016), while the present studies instead examine a collective goal that is not shared by all consumers. To be clear, this paper investigates goal pursuit in a social context. Consistent with previous literature, the current research demonstrates that perceiving the goal as desirable (Koo and Fishbach 2008) and one's contribution as impactful (Fishbach et al. 2011; Cryder et al. 2013; Velasco Moreno et al. 2019) spurs participation. However, the present work revealed that these processes are influenced by collective progress framing for those who might be disinclined toward the goal. In contrast to studies focused on individual goal pursuit (Koo and Fishbach 2012), the present studies of collective goal pursuit demonstrated that a remaining progress frame was most effective early in goal pursuit while an accumulating progress frame was most effective late in goal pursuit. These divergent findings may arise from differences between individual and collective goal pursuit. For example, in collective goal pursuit, social considerations may play a larger role in shaping motivations. Considerations of the

needs of others or the likely motivation for others' actions may become more salient by highlighting the great need for progress early on and a high amount of achieved progress later on, thus spurring people to participate. Consistent with this possibility, increased perceptions of the goal's desirability likely arise due to inferences drawn from observing others' high contributions and mediate the effects observed in Study 1, and feelings of helping appear to track responses to framing in both studies. These processes are less likely to play a role in shaping individual goal pursuit, as such social considerations are more limited (Fishbach and Dhar, 2005; Novemsky and Dhar, 2005; Schumpe et al. 2018). The role of goal desirability in shaping motivation here is consistent with theories of goal commitment that emphasize the role of both the expectation that the goal will be achieved and the value of pursuing the goal (e.g., Liberman and Förster 2008; Zhang and Huang 2010). The current findings indicate that the accumulating progress frame helps supplement the goal commitment of those who are disinclined toward the goal by increasing the perceived desirability of the goal.

The present findings also contribute to a growing literature examining how political identities shape consumer behavior. In the present research, we used political affiliation as a proxy for likely support of the goal of the waste reduction drive, a context in which support is broad among liberal consumers and likely more variable among conservative consumers. One interesting avenue for future research is to examine whether the present findings are shaped by cognitive and attitudinal differences between liberals and conservatives, such as sensitivity to different appeals (Winterich et al. 2012; Kidwell et al. 2013), adherence to different moral values (Haidt and Graham 2007; Graham et al. 2009; Graham et al. 2011), and diverse desires for differentiation (Ordabayeva and

Fernandes 2018). Several possibilities arise regarding whether the findings related to broadening the participation of conservative consumers generalize to liberals. One possibility is that these results generalize to other groups that are less likely to support a campaign's goal, such as Black Lives Matter activists responding to a fundraiser for the police department. Indeed, some prior research suggests that even stronger effects might emerge with liberal consumers, who have shown greater effects of political ideology on consumption than conservative consumers (Jost et al. 2017; Jung et al. 2017).

Another possibility is that effects of framing on participation may be similar for both liberals and conservatives, but may be driven by different underlying psychological processes. For example, conservative consumers may be more likely to consider the reaction of an in-group to their behavior, while liberals may be more likely to consider the fairness of their actions to others (Jost et al. 2017). Interrogating these possibilities make for a rich area for future research that would inform work on both political consumption and social goal pursuit. Relatedly, our finding that highlight accumulating progress results in similar motivation to participate for both Democrats and Republicans in the current study could be the results of a "moral nudge." Highlighting what others are likely to do has been shown to increase prosocial behavior in economic games (Tappin and Capraro 2018; Capraro and Vanzo 2019), spur charitable giving (Capraro et al. 2019), and decrease tax evasion (Bott et al. 2017). Both the progress manipulation employed here and moral nudges share the feature that they draw attention to what others do. Here, we also demonstrate that highlighting accumulating progress in late stage campaigns operates by signaling that the goal is valuable, in addition to helping one's community.

One interesting aspect of the individual goal pursuit literature is the finding that motivation may be at its lowest in the middle of goal progress (Bonezzi et al. 2011; Huang 2018). This effect may emerge because new progress achieved may appear marginal in contrast to both previous progress achieved and progress remaining. We don't find any differences between early-stage and middle-stage collective drive progresses in the present research, suggesting this effect may be governed by different mechanisms in the context of collective goal pursuit. However, more research should examine this question. In the present studies, motivation to participate was at ceiling for Democrat participants. As a result, they exhibited less sensitivity in the current studies to the processes that were found to guide Republican participants' decisions to participate. Future studies featuring less polarizing goals might avoid such ceiling effects and potentially allow examination of these processes in both groups.

The present findings have important practical implications for brands orchestrating collective marketing campaigns. First, we demonstrate that the framing of collective progress broadens participation in collective marketing campaigns. Organizations seeking to spur participation in such campaigns should thus highlight remaining contributions needed early in the campaign and accumulated contributions received later in the campaign. Second, these findings are timely, given the growing trend for brands to incorporate more political considerations into their advertising (Kim et al. 2018). The current results suggest that the framing of information may be used to avoid alienating consumers that are less likely to support the political attitudes incorporated into the advertising campaigns. Finally, these results broadly address customer relationship management, as the context for the waste reduction drive was a customer loyalty program

and the framing had ramifications for brand perceptions. As political identities begin playing a larger role in consumer behavior, identifying means such as those studied here to appeal to all consumers can boost loyalty and avoid the potential for brand relationships to conflict with political views.

The present research does, however, have a few limitations. First, the campaign scenarios employed here are hypothetical. We used this approach to avoid associations with actual brands or stores which might confound the findings, but future work should examine these processes in an incentive-compatible design. Second, it would be ideal if we had examined both early and late stage campaigns within the same experiment to allow for more direct comparison of the underlying psychological mechanisms. Third, while we used political party affiliation as a proxy for likely support of the campaign goal, it would be helpful if future research employed a more direct index of participants' initial commitment to the communal goal. Finally, the campaign employed in the present research included a direct benefit to those who chose to participate in the campaign, as they moved closer to earning a free beverage. Future research could examine more altruistic campaigns, such as charitable donations, where participation does to produce a tangible direct benefit for the consumer.

In conclusion, the present experiments demonstrate that framing information regarding others' actions shapes motivation to participate in a collective marketing campaign. Highlighting remaining progress needed earlier in a campaign and accumulated progress achieved later in a campaign broadens its appeal to consumers who might otherwise have been unlikely to share the campaign's goal. Perceptions of goal desirability, the impact of one's contributions, and feelings of helping appear to underlie

this broadened motivation. These findings can inform both marketers and policymakers seeking to conduct successful collective campaigns.

CHAPTER 3

ESSAY 2: THE “ACHILLES HEEL” OF ESTABLISHED BRANDS: THE EFFECT OF BRAND AGE ON CONSUMERS’ BRAND CHOICE

Brand awareness and brand image are two key dimensions of brand knowledge (Keller 1993, 2003). Effective brand management thus necessitates creating brand awareness and shaping a unique brand image or “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller 1993, p. 3). Firms often focus on specific attributes (i.e., intrinsic or product-related and extrinsic or non-product-related) and/or emphasize certain benefits (i.e., functional, symbolic, and experiential) to create and shape brand associations that make up the brand image (Keller 1993, 2003). A common extrinsic brand attribute that firms advertise or emphasize is their age or year of establishment (YOE). For example, Fuller’s Brewery of London advertised “Our breweries stood in London, beside the Thames, since 1845” (Newman and Dhar 2014), Lifesavers Mints advertised “100 years of Keeping Mouths Feeling Fresh,” and Geico advertises “Over 75 years of Savings and Service.” Numerous brands, across a variety of products and services, highlight their age by stating the YOE alongside the brand name in their brand logos. Examples include Founders Insurance (Since 1901), Guinness (Estd. 1759), Levi Strauss (Patented in US May 20 1873), Lindt (Master Chocolatier Since 1845), Rayban (Genuine since 1937), Sapporo (Since 1876), Sheraton (Est. 1937), and Tissot (Swiss Watches since 1853).

Despite the emphasis that many brands place on actively communicating their age (or years in existence) and the ubiquity of YOE in brand logos, research on the specific

effects of brand age on consumer response is relatively sparse. The literature on brand heritage, which encompasses track record, longevity, core values, use of symbols, and a firm's belief that its history is important (Balmer and Burghausen 2015; Urde, Greysler, and Balmer 2007), captures some of the essence of brand age. For example, using YOE as one of several dimensions to examine the consequences of brand heritage, Rose et al. (2016) report that brands with heritage are associated with positive emotions, engender trust, attachment, and commitment, thereby leading to higher purchase intentions. However, by definition, brand heritage is a much broader construct that encompasses multiple dimensions (Balmer and Burghausen 2015; Urde et al. 2007). Further, brand age has been conceptualized and shown to be an antecedent of brand heritage (Pizzi and Scarpi 2019).

The few studies that examine the specific effects of brand age suggest that YOE acts as a signal or an extrinsic cue about the quality and credibility of the brand (Erdem and Swait 2004). Consumers may use YOE to infer that, given the competition in the marketplace, a brand that has survived and withstood the test of time is likely to be of high quality (Desai, Kalra, and Murthi 2008; Zhang, Kashmiri, and Cinelli 2019). Supporting this intuition, previous research demonstrates that brand attitudes and purchase intentions are higher for older, established brands relative to young brands (Beck, Lude, and Prüggl 2016; Desai et al. 2008; Pizzi and Scarpi 2019). Further, consistent with notions of cue diagnosticity (e.g., Purohit and Srivastava 2001; Richardson, Dick, and Jain 1994), research demonstrates that the effects of YOE are attenuated when brand names are familiar (Pizzi and Scarpi 2019), or when other more diagnostic and/or intrinsic cues are available (Desai et al. 2008). Desai et al. (2008)

reported a higher preference for a younger, riskier brand only when consumers were facing a loss in the context of a mutual fund investment decision. In sum, much of the existing literature on the effects of brand age (and brand heritage) can generally be characterized as suggesting that *old is gold*.

In the current research, we take a different approach to the topic. We take a contingent perspective on the effects of brand age (i.e., YOE) on brand preference and choice. Unlike the earlier examples featuring relatively established brands, Castlemaine (Estd. 2014), Darling (Since 2010), Honey and Babies (Est. 2014), and Roys Skincare (Estd. 2019) are relatively young brands which highlight their YOE in their logos and emphasize their age in their marketing communications. In light of previous research, should young brands highlight their age? Consider a tourist from the United States, making a choice between two unfamiliar brands of chocolates in the Netherlands – Brand A (Since 1942) and Brand B (Since 2011). Which brand is the tourist likely to prefer? Now consider another consumer making a choice between two unfamiliar brands of virtual reality headsets – Brand A (Since 2002) and Brand B (Since 2018). Which brand would the consumer prefer? Following previous research, will both consumers prefer Brand A because it is the older, more established brand? Or will most consumers prefer the older brand in one product category and the younger brand in the other product category, and if so, which product category, and why? The current research seeks to address these questions.

Broadly, our research contributes to the literature on the effects of brand attributes on brand image (e.g., Jiang et al. 2016; Newman and Dhar 2014). More specifically, the current research advances our understanding of how brand age affects consumer

preferences and choices. First, we identify and test conditions when an established brand is preferred, *and* when a relatively young brand is preferred. In contrast to the *old is gold* characterization, we propose that consumer preference for younger brands increases with their perceptions of product category innovativeness. Unlike the majority of research on product innovation, our definition of product category innovativeness – the extent to which a product category is perceived to have changed in the past and is expected to change in the future – is from the perspective of the consumer (Lee and O’Connor 2003; Mick and Fournier 1998). Second, we provide insight into the underlying reasoning for the positive relationship between preference for younger brands and perceptions of product category innovativeness. Consistent with the notion that brands and products may be viewed in terms of human characteristics (e.g., Aaker 1997; Aggarwal and McGill 2007; Fournier 1998), we argue that consumers rely on age stereotypes, or widely held beliefs about age and human characteristics, to form brand personality impressions which then influences their preference. Older, established brands are perceived to be stable, mature, and persevering, whereas younger brands are perceived to be dynamic, modern, and innovative. The distinct personalities based on age stereotypes thus underlie preferences for young (old) brands when the product category is perceived to be innovative (versus stable). Third, we show that the use of age stereotypes to form brand personality impressions can be conceptualized as a decision heuristic that consumers use automatically, quickly, and effortlessly (Bodenhausen and Wyer 1985; Kahneman 2011). Fourth, we highlight the malleability of age stereotypes by showing that providing stereotype inconsistent information attenuates the relationship between preference for younger brands and perceptions of product category innovativeness. Our research thus

not only makes a theoretical contribution to the literature but also has implications for brand managers, particularly when consumers are relatively unfamiliar with the brand.

Theoretical Background

Brand Age and Perceptions of Product Category Innovativeness

Although there is a relatively large literature on the effects of extrinsic cues such as the shape (Jiang et al. 2016) and color of brand logo (Labrecque and Milne 2012), original manufacturing location (Newman and Dhar 2014), and country-of-origin (Maheswaran 1994), there is relatively little research that has examined the effects of brand age on consumers. The limited research that exists suggests that brand age is used as a signal or a cue to infer a brand's quality, consistency, and reliability (Beck et al. 2016; Desai et al. 2008). Given the relatively high rate of new brand failure (Reimann et al. 2012), consumers may infer that an established brand is unlikely to have survived unless it has been offering a quality product/service and is likely to continue to do so in the future. Further, consumers may believe that an established brand has ironed out the "kinks" in their offerings over time, thereby reducing variability in their offerings (Desai et al. 2008). The brand heritage literature also suggests that old (vs. young) brands are perceived to be more reliable and trustworthy (Pizzi and Scarpi 2019), which may provide a buffer when the firm is involved in unethical behavior (Zhang et al. 2019). However, Desai et al. (2008) reported a preference for a younger brand when participants, choosing between two mutual funds, were given a target return rate higher than the expected performance of the two funds. Most participants, facing an imminent loss, preferred the riskier, younger brand. Other than this exception, the previous research on

the specific effects of brand age and brand heritage can be characterized as suggesting *old is gold*.

We take a different approach to examining the effects of brand age. Rather than focusing on the effects of brand age via the perceived quality and reliability route, we examine the link between brand age and impressions of brand personality (Aaker 1997; Aggarwal and McGill 2007) to identify conditions under which an established brand is preferred and when a younger brand is preferred. Specifically, we examine consumer preferences for younger (vs. established) brands as a function of perceptions of product category innovativeness. Adapting from previous research on the relationship between product innovativeness and performance (Szymanski, Kroff, and Troy 2007), which defines product innovativeness as the perceived difference between new and previous offerings, we define perceptions of product category innovativeness as the extent to which a product category is perceived to have *gone* through changes over time and the expectation that the product category *will* undergo changes over time. Note that our conceptualization is different from the literature that examines the notion of product innovativeness and its impact on market performance from the perspective of the firm (e.g., Banbury and Mitchell 1995; Chandy, Prabhu, and Antia 2003; Kleinschmidt and Cooper 1991). Much of this literature has examined the impact of product innovativeness on the firm (e.g., development, production, and launch) and consumer (e.g., learning to use and adopt). Consumers may avoid adopting some radical product innovations because of the uncertainty and anxiety associated with learning the functionality of the new technology (Castaño et al. 2008; Mick and Fournier 1998). Our conceptualization is also different from the literature on consumer innovativeness, which focuses on identifying a

segment of consumers who are most likely to be early adopters based on intrinsic personality traits such as receptive to new ideas and novelty seeking (Goldsmith and Hofacker 1991; Hirschman 1980; Midgley and Dowling 1978).

Although our conceptualization of perceptions of product category innovativeness is also consumer-centric, we focus on consumer beliefs about a product category's evolution in the past and its expected evolution in the future. Importantly, we examine the relationship between perceptions of product category innovativeness and preferences for an established versus younger brand. Interestingly, the management and organization literature on the effects of firm age on its capabilities and performance provides an inconsistent picture with regards to the relationship between product innovativeness and firm age. On one hand, experienced firms by virtue of learning over time may be better able to leverage existing capabilities and knowledge to develop innovations (Bigelow, Nickerson, and Park 2019; Cohen and Levinthal 1990; Helfat and Raubitschek 2000) compared to a younger firm. On the other hand, established firms may be less flexible in adapting to changes quickly because of organizational inertia (Sørensen and Stuart 2000), whereas younger firms may be nimbler in adapting to changes more quickly.

In contrast to the management and organization literature, we draw on the literature on the anthropomorphization of brands and products (Aaker 1997; Aaker, Fournier, and Brasel 2004; Aggarwal and McGill 2007) to suggest that consumers use age stereotypes to form brand personality impressions based on its age, particularly when the brand name is relatively unknown. The use of age stereotypes is consistent with the notion that brands are seen as symbolic representations of human personality traits. In fact, brand personality is defined as “the set of human characteristics associated with a

brand” (Aaker 1997, p. 347). Using a sample of 131 relatively well-known brands, Aaker (1997) identified five dimensions of brand personality (competence, excitement, ruggedness, sincerity, and sophistication) and argued that brands are imbued with distinct personalities. Research also suggests that consumers form different relationships with brands based on their distinct personalities (Aaker et al. 2004; Fournier 1998). Consistent with the idea of “humanizing” brands, we examine the extent to which certain well-developed age stereotypes about humans (e.g., Posthuma and Campion 2009; Rosen and Jerdee 1976) are used in forming impressions about brand personality.

Given individuals’ natural inclination to classify people into categories, it is not surprising that age stereotypes, or the beliefs and expectations about individuals based on their age (Hamilton and Sherman 1994; Hummert 1999), are used in forming impressions about people. Research on age stereotypes, particularly in the workplace and health contexts, typically suggests that stereotypes are often inaccurate or distorted beliefs about people based on age (Kornadt and Rothermund 2011; Posthuma and Campion 2009). Although the majority of the research suggests that most age stereotypes portray older adults negatively, some stereotypes ascribe positive characteristics to older adults (Bal et al. 2011; Kornadt and Rothermund 2011). In a review of over 100 studies of age stereotypes in the workplace, Posthuma and Campion (2009) reported that older (vs. younger) adults are on the one hand associated with less motivation, less ability to learn, less propensity for risk-taking, less creativity, and harder to train as they are perceived to be less flexible and more resistant to change (Rosen and Jerdee 1976). On the other hand, older (vs. younger) adults are viewed as more trustworthy, stable, dependable, and reliable (Bal et al. 2011; Posthuma and Campion 2009; Rosen and Jerdee 1976). We note

that while there is a large literature on negative stereotypes of aging in the health domain such as feebleness, ill-health, poor mental and physical functioning (e.g., Dionigi 2015), such stereotypes are less likely to be used to form impressions about inanimate brands.

We propose that there is a positive relationship between perceptions of product category innovativeness and preferences for younger (vs. older, established) brands. The lower the perceptions of a product category's innovativeness, the more likely it is that the product category is characterized as stable and mature since it is perceived to have undergone relatively little change over time. The extent to which consumers use age stereotypes to form impressions of brand personality, the characteristics of product categories perceived to be low in innovativeness are consistent with the age stereotypes of older adults (e.g., mature, stable, reliable, and less likely to change). In contrast, the higher the perceptions of a product category's innovativeness, the more likely it is that the product category is characterized as young and dynamic since it is perceived to have gone through changes in the past and is expected to change in the future as well. The characteristics of product categories perceived to be high in innovativeness are thus consistent with the age stereotypes of younger adults (e.g., young, dynamic, modern, and innovative). Consider again the tourist, making a choice between the two unfamiliar brands of chocolates in the Netherlands – Brand A (Since 1942) and Brand B (Since 2011). The extent to which perceptions of product category innovativeness for chocolates is relatively low, the tourist is likely to prefer Brand A. Consider also the choice between the two unfamiliar brands of virtual reality headsets – Brand A (Since 2002) and Brand B (Since 2018). The extent to which perceptions of product category innovativeness for virtual reality headsets is relatively high, most consumers are likely to prefer Brand B. In

sum, our conceptualization suggests that brand preference based on age depends on the match (or congruence) between characteristics of product categories based on perceived innovativeness and brand personality impressions based on age stereotypes (Meyers-Levy and Tybout 1989).

H1: There will be a positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands.

H2: The relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands will be mediated by impressions of brand personality based on age stereotypes.

Age Stereotypes as Judgmental Heuristics

Research in social cognition suggests that stereotypes, or overstated beliefs and assumptions about a category that are widespread and entrenched, can be thought of as cognitive schemas that organize individuals' expectations about others based on broad categories, rather than individual differences or unique circumstances (Fiske and Taylor 1991). Although stereotypes may lead to bias in judgments, they play a useful role in categorizing and evaluating stimuli in a quick, simple, and predictable manner (Bodenhausen and Wyer 1985). Since stereotype-based judgments are spontaneous and automatic, requiring little or no cognitive resources, stereotypes can be viewed as judgmental heuristics that are used to simplify decision making (Bodenhausen and Wyer 1985; Bodenhausen 1990). Individuals are thus more likely to rely on stereotypes unless they have sufficient ability and motivation to engage in information processing that is effortful, deliberative, and systematic (Bodenhausen 1990).

Consistent with this reasoning, and most dual processing theories of information processing (e.g., Kahneman 2011), we argue that individuals are more likely to rely on the age stereotype heuristic to form brand personality impressions when they make decisions quickly and spontaneously without expending any cognitive resources. However, reliance on age stereotypes to form brand personality impressions is likely to attenuate when the decision making is slow, effortful, and deliberate. The extent to which the reliance on age stereotypes to form brand personality impressions is attenuated when the processing is slow and controlled, the positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is likely to be attenuated.

H3: The positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is likely to be stronger when the decision making is fast versus slow.

Reducing Reliance on Age Stereotypes

The conceptualization of stereotypes as judgmental heuristics, which are used spontaneously and automatically, suggests that many judgments are likely to be biased (e.g., Posthuma and Campion 2009; Rosen and Jerdee 1976; Rubinstein, Jussim, and Stevens 2018). While motivation to engage in information processing can be altered by external factors (e.g., fast versus slow processing), characteristics of the stimuli may also attenuate the reliance on stereotypes. A meta-analysis suggests that the effects of age stereotypes are weakened when more detailed information was provided about the person being evaluated (Kite et al. 2005). Posthuma and Campion (2009) report that the effect of

age stereotype reduced in the workplace when job related information was provided.

Research thus suggests that providing more information about the individual may reduce the reliance on age stereotypes to evaluate the individual (Rubinstein et al. 2018).

In the context of gender stereotypes, research showed that providing information counter to the gender stereotype reduced bias (Blair and Banaji 1996). Blair and Banaji (1996) argued that providing stereotype inconsistent information leads to more controlled and systematic processing compared to automatic processing when no such information is provided. We thus examine the effect of providing stereotype inconsistent information on the reliance of age stereotypes in forming impressions about brand personality, thereby influencing brand preferences. Whereas providing stereotype consistent information is likely to reinforce the reliance on the stereotype, providing stereotype inconsistent information may give consumers a reason to pause and process the information more effortfully, thus attenuating the reliance on age stereotypes to form impressions about brand personality. The positive relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brands is likely to be attenuated when brands provide information that is inconsistent with age stereotypes (compared to no information or information consistent with the age stereotypes).

H4: The positive relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brands will be attenuated when brands provide information that is inconsistent with age stereotypes (vs. consistent information or no information).

We test the four hypotheses in a series of six studies. Study 1 tests Hypothesis 1

by examining the extent to which consumer preferences for older versus younger brands are related to perceptions of product category innovativeness across thirteen different product categories. Study 2 tests Hypotheses 1 and 2 and examines whether impressions of brand personality based on age stereotypes underlie the relationship between brand preferences and perceptions of product category innovativeness. Study 3 examines the robustness of the findings by manipulating perceptions of product category innovativeness, holding the product category constant. Study 4 tests Hypothesis 3 and examines the extent to which slowing down the decision-making process attenuates the reliance on age stereotypes as a heuristic to form brand personality impressions. Studies 5 and 6 test Hypothesis 4 and examine whether providing brand taglines inconsistent with age stereotypes (compared to no taglines in Study 5 and stereotype consistent taglines in Study 6), attenuate the reliance on age stereotypes, thus moderating the relationship between brand preferences and perceptions of product category innovativeness.

Study 1: Product Category Innovativeness and Brand Age

Study 1 begins the investigation by examining whether consumers' brand preference for younger (vs. established) brands varies with their perceptions of product category innovativeness. In contrast to the previous literature, which suggests that *old is gold*, Hypothesis 1 predicts that consumers are more likely to prefer younger (vs. established) brands the higher their perceptions of product category innovativeness. To test Hypothesis 1, we asked participants to choose between two brands in thirteen different product categories. The two brands in each of the thirteen product categories varied in terms of their YOE.

Method and Procedure

Two hundred and eleven U.S. participants (mean age = 37.3, 54.5% females) were recruited from Amazon's Mechanical Turk for a payment. Participants were told that a new online shopping website was collecting brand preference data across several product categories to understand their potential customers and provide them with a tailored shopping experience in the future. They were informed that the brand names were disguised for the purpose of the study and were asked to choose between two brands across thirteen product categories (see Appendix E). For each of the product categories, participants were shown a picture of the product category and then asked to indicate their brand preference. For example, in the virtual reality headsets category (see Appendix F), participants saw a picture of a virtual reality headset and were then asked, "If you were shopping for virtual reality headsets, which brand would you choose to purchase?" (Brand A, Since 2002 or Brand B, Since 2018).

Several aspects of the study are noteworthy. First, the thirteen product categories were chosen to represent a variety that would not be limited to specific demographics. Second, because of differences in the evolution of the product categories, the YOE for each product category was adjusted to be realistic based on the growth of each category. For example, the YOE for the established brand in the dried tea leaves category was 1876 whereas the YOE for the established brand in the virtual headset category was 2002. Third, to isolate the effects of brand age, the brands were simply labeled as Brand A and Brand B. Fourth, the order in which participants were exposed to the thirteen product categories was randomized. Fifth, in order to control for order, half the participants saw

Brand A (B) as the established (young) brand while the other half saw Brand A (B) as the young (established) brand.

For each of the thirteen product categories, in addition to indicating their choice between the established and the young brand, participants' perceptions of product category innovativeness were measured by averaging responses to three seven-point items ($\alpha = .94$): "I expect that a brand in this product category would bring about innovative change over time," "This product category has gone through a lot of changes over time," and "Over time, a brand in this product category would offer dramatic changes in product features" (1 = Strongly disagree; 7 = Strongly agree). Similar scale items were used by Lee and O'Connor (2003) to measure innovativeness or product superiority to the customer from the perspective of a firm. We adapted and modified the scales to measure product category innovativeness from the perspective of the consumer. Finally, participants provided demographic data.

Results and Discussion

A repeated measures logistic regression with brand choice (young = 1, old = 0) as the dependent measure and perceptions of product category innovativeness, order, and their interaction as the independent variables revealed a significant effect of perceptions of product category innovativeness ($\beta = 0.37$, SE = .07, Wald $\chi^2 = 32.12$, Exp (β) = 1.45, $p < .001$) with no effects of order or the two-way interaction (all p 's $> .159$). Consistent with Hypothesis 1, participants' preference for younger brands increased with their perceptions of product category innovativeness (see Figure 5). Said differently, in contrast to the characterization that *old is gold*, our data suggest that preferences for established, older brands decrease with perceptions of product category innovativeness.

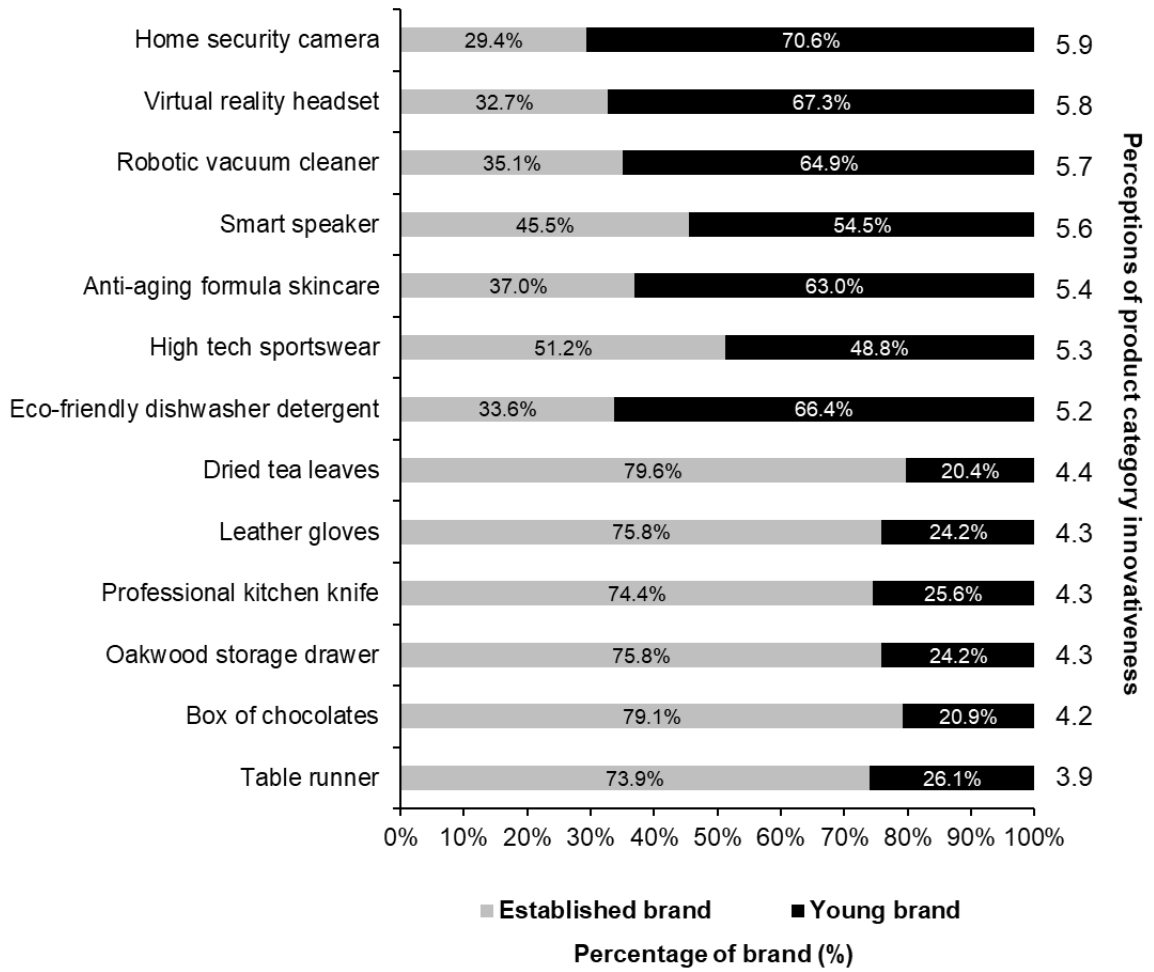


Figure 5. Essay 2 Study 1: Brand Preference and Perceptions of Product Category Innovativeness

Table 1 displays the brand preferences for the younger brands across the thirteen product categories. Perceptions of product category innovativeness varied from 3.9 (table runner) to 5.9 (home security camera) and examining brand choice at these extremes clearly demonstrates that preferences for the established brand dropped from almost 74% (table runner) to 29% (home security camera) as perceptions of product category innovativeness increased. It is worth noting that preference for established brands is not just attenuated, but that the younger brands are preferred in many product categories perceived to be high in innovativeness.

Consistent with Hypothesis 1, Study 1 demonstrates a positive relationship between brand preference for a younger (vs. established) brand and perceptions of product category innovativeness. As in the previous literature on the effects of brand age (Beck et al. 2016; Desai et al. 2008; Pizzi and Scarpi 2019), established, older brands are preferred in product categories perceived to be relatively low in innovativeness. In contrast, younger brands are preferred in product categories perceived to be high in innovativeness. Our findings thus highlight a boundary condition under which younger (vs. established) brands are preferred.

Table 1. Essay 2 Study 1: Preference for Younger Brand Across Product Categories

Perceptions of product category innovativeness	Product category	Percentage of young brand (%)	<i>p</i> -value (50% as comparison)
5.9	Home security camera	70.62%	< .001
5.8	Virtual reality headset	67.30%	< .001
5.7	Robotic vacuum cleaner	64.93%	< .001
5.6	Smart speaker	54.50%	.191
5.4	Anti-aging formula skincare	63.03%	< .001
5.3	High tech sportswear	48.82%	.731
5.2	Eco-friendly dishwasher detergent	66.35%	< .001
4.4	Dried tea leaves	20.38%	< .001
4.3	Leather gloves	24.17%	< .001
4.3	Professional kitchen knife	25.59%	< .001
4.3	Oakwood storage drawer	24.17%	< .001
4.2	Box of chocolates	20.85%	< .001
3.9	Table runner	26.07%	< .001

Study 2: Role of Brand Personality

Study 2 tests Hypothesis 2, which predicts that the positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands will be mediated by brand personality impressions based on age stereotypes. In other words, consumers rely on age stereotypes to form impressions about brand personality, and the match between brand personality and characteristics of product categories based on perceived innovativeness underlies brand preferences.

Method and Procedure

Three hundred and twenty-five U.S. participants (mean age = 36.2 years, 49.5% female) were recruited from Amazon's Mechanical Turk for a nominal payment. In a shopping simulation similar to Study 1, participants were randomly assigned to one of four conditions in a 2 (product category: virtual reality headset and chocolates) \times 2 (presentation order: Brand A established and Brand A young) between-subjects design. Based on Study 1 findings, it was expected that perceptions of product category innovativeness would be relatively low (high) for chocolate (virtual reality headset). The YOE for these categories were identical to Study 1.

As in Study 1, participants saw a picture of the product category and then made a choice between an established brand and a young brand. All participants were asked to list the thoughts they had while making their choice. We then measured participants' impressions of brand personality for both brands. Following Aaker (1997), participants were instructed: "We would like you to think of each brand as if it were a person. This may sound unusual but think of the set of human characteristics associated with each brand. For example, you might think that the human characteristics associated with Pepto

Bismol are kind, warm, caring, soothing, gentle, trustworthy, and dependable. The human characteristics associated with Dr Pepper might be non-conforming, fun, interesting, exciting, and off-beat. We are interested in finding out which personality traits or human characteristics come to mind when you think of the brands on the previous page. Please rate the extent to which each of the personality traits describes each brand.” Although Aaker (1997) identified five brand personality dimensions based on participants’ ratings of ten known brands on 114 traits, all the dimensions (and traits) do not apply to our situation where participants rated two unknown brands based on YOE only. We thus generated a set of 90 potential age-relevant traits from the literature on brand personality (Aaker 1997), brand heritage (Morhart et al. 2015), brand age characteristics (Guillory 2012), and age stereotypes (Posthuma and Campion 2009; Rosen and Jerdee 1976; Soto et al. 2011) to assess the extent to which age stereotypes are used in forming impressions of brand personality (see Table 2). Participants were asked to rate the extent to which each of the personality traits describes each brand on a seven-point item (1 = Not at all descriptive; 7 = Extremely descriptive). Perceptions of product category innovativeness ($\alpha = .88$) and demographic information were measured as in Study 1.

Table 2. Essay 2 Study 2: Brand Personality Dimensions and Traits

Dimension name	Variance explained	Traits	Factor loading
1. Stableness	52.2%	Responsible	.82
		Loyal	.77
		Wholesome	.76
		Stable	.76
		Efficient	.75
		Secure	.74
		Organized	.74
		Persevering	.73
		Hard working	.73
		Reliable	.72
		Cooperative	.70
		Practical	.70
		Successful	.68
		Competent	.68
		Leader	.68
		Professional	.67
		Logical	.67
		Family oriented	.67
		Mature	.67
		Confident	.63
2. Dynamism	7.7%	Poised	.61
		Dominant	.59
		Innovative	.78
		Trendy	.77
		Modern	.75
		Creative	.72
		Adventurous	.71
		Imaginative	.70
		Exciting	.70
		Up to date	.66
		Daring	.65
		Dynamic	.65
3. Carelessness	6.1%	Cool	.65
		Flashy	.64
		Stylish	.57
		Young	.36
		Careless	.85
		Useless	.85
		Irrelevant	.83
		Out of touch	.80

Excluded items: Honest, Friendly, Sincere, Real, Good looking, Thoughtful, Smooth, Cheerful, Charming, Independent, Down to earth, Sentimental, Realistic, Spirited, Enthusiastic, Helpful, Reflective, Upper class, Conservative, Rejuvenating, Functional, Iconic, Original, Technical, Intelligent, Contemporary, Adaptive, Active, Vibrant, Quick, Curious, Energetic, Novel, Unique, Agile, Outdoorsy, Western, Aggressive, Rugged, Rigid, Small town, Humorous, Feminine, Unpredictable, Impulsive, Tough, Unconventional, Masculine, Glamorous, Corporate

Results

Checks

Consistent with Study 1, a 2×2 ANOVA on perceptions of product category innovativeness revealed only a main effect of product category as participants rated virtual headset as a more innovative product category than chocolate (M 's = 5.72 vs. 4.32; $F(1, 321) = 113.06, p < .001, \eta_p^2 = .26$). No other effects were significant (all p 's > .583).

Brand Choice

A logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, presentation order, and the two-way interaction as the independent variables revealed a significant effect of product category ($\beta = 1.05, SE = .33, \text{Wald } \chi^2 = 10.30, \text{Exp } (\beta) = 2.86, p = .001$). No other effects were significant (all p 's > .250). As in Study 1, participants' preference for the younger (vs. established) brand was significantly higher in the virtual reality headset category (54.5%) than in the chocolate category (26.9%).

Brand Personality

Based on previous research (e.g., Kim, Barasz, and John 2018), our analysis started with the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy and the Bartlett's test of sphericity. The KMO measure was .976, higher than .800 as the benchmark, and Bartlett's sphericity test was significant ($p < .001$), indicating that the data were appropriate for factor analyses. Since our objective was to identify consumer impressions of brand personality, the ratings for each brand on each of the 90 traits were averaged across the participants ($n = 325$). We then conducted a principal component factor

analysis with varimax rotation suppressing factors with eigenvalues less than 1 and traits whose factor loadings were less than .4. This analysis yielded eight factors, accounting for 70.5% of the total variance. However, 49 traits loaded on multiple factors, and one trait did not load on any factor. Following Aaker (1997), we conducted another principal component factor analysis after removing these traits, which revealed a three-factor structure accounting for 66% of the total variance. Of the 90 traits, 40 were retained (see table 2). Each of the three factors, labeled stableness (22 traits, $\alpha = .97$), dynamism (14 traits, $\alpha = .96$), and carelessness (4 traits, $\alpha = .90$), was internally reliable and robust as a similar pattern of factors emerged when the old and young brands were analyzed separately.

Three separate *t*-tests on each of the three brand personality dimensions revealed that while the established brand was rated higher in stableness (M 's = 5.07 vs. 4.25; $t(324) = 10.82, p < .001, d = .60$), it was rated lower in dynamism (M 's = 3.98 vs. 4.99; $t(324) = 13.77, p < .001, d = .76$), and there was no difference in carelessness (M 's = 3.03 vs. 3.09; $t(324) = 0.84, p = .404, d = .05$), compared to the younger brand.

Mediating Role of Brand Personality

The extent to which age-based brand personality impressions mediated the relationship between perceptions of product category innovativeness and brand preference was examined. Hayes' (2017) parallel multiple mediator test (PROCESS 4) with brand choice as the dependent variable, product category as the independent variable, and the difference score (old – young) for the personality dimensions of stableness, dynamism, and carelessness as parallel multiple mediators, showed that the indirect effect of product category innovativeness on brand choice was significant

through stableness (indirect effect: $\beta = 0.86$, $SE = .27$, $CI\ 95\% = [.444, 1.484]$) and dynamism (indirect effect: $\beta = -0.35$, $SE = .16$, $CI\ 95\% = [-.708, -.099]$), but not carelessness (indirect effect: $\beta = 0.10$, $SE = .09$, $CI\ 95\% = [-.056, .309]$). The total indirect effect was also significant (total indirect effect: $\beta = 0.60$, $SE = .32$, $CI\ 95\% = [.063, 1.327]$). Hypothesis 2 is thus supported.

Discussion

Study 2 provides further support for Hypothesis 1 by demonstrating that preferences for the younger brand were higher in the virtual reality headset category, which was perceived to be higher in innovativeness compared to the preferences for the established brand in the chocolate category. Consistent with Hypothesis 2, Study 2 also shows that the positive relationship between perceptions of product category innovativeness and preferences for younger brands is mediated by age-based impressions of brand personality. Specifically, whereas an established brand was perceived to be stable, persevering, and mature, a younger brand was perceived to be innovative, modern, and dynamic. Consistent with our reasoning, when the product category was perceived to be high (low) in innovativeness, the age-based brand personality of the younger (established) brand was more of a match, thus increasing its preference.

Although Studies 1 and 2 support Hypotheses 1 and 2 and highlight a boundary condition for when younger (vs. established) brands are preferred, perceptions of product category innovativeness in both studies were varied through different product categories. The notion that some product categories are perceived to be more innovative and that consumers may prefer younger brands in these product categories is at the core of our

thesis. Nonetheless, Study 3 varies perceptions of product innovativeness, holding product category constant, to bolster support for our conceptual reasoning.

Study 3: Controlling for Product Category

Method and Procedure

One hundred and sixty-nine U.S. participants (mean age = 36.5 years, 48.5% female) were recruited from Amazon's Mechanical Turk for a nominal payment. In a shopping simulation similar to Study 1, participants were randomly assigned to one of four conditions in a 2 (product innovativeness: high and low) \times 2 (presentation order: Brand A established and Brand A young) between-subjects design (see Appendix G). All participants saw a picture of a travel suitcase, read the description which was used to manipulate product innovativeness, and then made a choice between an established brand (Since 1942) and a young brand (Since 2016). All participants were then asked to list the thoughts they had while making their choice.

Following Study 2 findings, participants' age-based impressions of brand personality for both brands were measured on the three dimensions of stableness, dynamism, and carelessness. To make the task more manageable, we measured stableness with six traits (competent, mature, persevering, responsible, secure, and stable, $\alpha = .90$), dynamism with six traits (dynamic, flashy, innovative, modern, stylish, and young, $\alpha = .90$), and carelessness with two traits (careless and irrelevant, $r = .73$). The fourteen traits were presented randomly for each brand. To check for the product innovativeness manipulation, participants responded to two seven-point items ($r = .77$): "I think the suitcase is innovative compared to other suitcases in the market" and "The suitcase offers new features that are not offered by other suitcases in the market" (1 = Strongly disagree;

7 = Strongly agree). Finally, demographic information was collected as in the earlier studies.

Results and Discussion

Checks

A 2×2 ANOVA on the manipulation check revealed a main effect of product innovativeness as participants perceived the travel suitcase to be more innovative in the high innovative condition than in the low innovative condition (M 's = 5.72 vs. 4.83; $F(1, 165) = 26.09, p < .001, \eta_p^2 = .14$). While the presentation order was not significant ($p = .966$), the two-way interaction between product innovativeness and presentation order was marginal ($p = .063$). The data suggest that the manipulation of product innovativeness was as intended.

Brand Choice

A logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product innovativeness, presentation order, and the two-way interaction as the independent variables revealed a significant effect of product innovativeness ($\beta = 1.30, SE = .49, \text{Wald } \chi^2 = 6.99, \text{Exp } (\beta) = 3.67, p = .008$). No other effects were significant (presentation order, $p = .099$; two-way interaction, $p = .863$). Consistent with the earlier studies, participants' preferences for the younger (vs. established) brand was significantly higher when the travel suitcase was perceived to be high in innovativeness (61%) compared to when it was perceived to be low in innovativeness (29.9%). In other words, preferences for the established brand dropped from 70.1% in the low innovativeness condition to 39% in the high innovative condition, thus supporting Hypothesis 1.

Brand Personality

As in Study 2, *t*-tests revealed that the established (vs. younger) brand was rated higher in stableness (M 's = 5.63 vs. 4.16; $t(168) = 10.62, p < .001, d = .82$) and lower in dynamism (M 's = 3.82 vs. 5.45; $t(168) = 12.73, p < .001, d = .98$). Unlike Study 2, the established brand was rated lower than the younger brand on carelessness (M 's = 3.01 vs. 3.29; $t(168) = 2.45, p = .015, d = .19$). Despite the expected differences in the age-based brand personality dimensions between the established and young brand, Hayes' (2017) parallel multiple mediator test (PROCESS 4) was not significant.

Taken together, Studies 1, 2, and 3 demonstrate that there is a relationship between perceptions of product category innovativeness and age-based brand preferences. Consistent with the characterization that *old is gold*, participants prefer an established (vs. younger) brand, but only when perceptions of product category innovativeness are low. In contrast, consumers prefer a younger brand when their perceptions of product category innovativeness are high. The reasoning is that the age-based brand preferences depend on the match between characteristics of product categories based on perceptions of innovativeness and the brand personality based on age stereotypes. Although the brand personality dimensions based on age stereotypes did not mediate the relationship between product innovativeness and brand preference in Study 3, Studies 2 and 3 demonstrate that participants relied on age stereotypes to form distinct impressions of brand personality. The established brand was perceived to be stable, mature, and persevering, whereas the young brand was perceived to be dynamic, modern, and innovative.

Studies 1, 2, and 3 thus strongly suggest that consumers rely on age stereotypes when forming impressions of brand personality, which then influence brand preferences. In this study, we measured a reduced number of brand traits from Study 2 by using a different product category but failed to replicate significant effects of brand personality dimensions in testing mediation effects. Shifting gears, Study 4 examines the underlying process and assesses the extent to which age stereotypes are used as judgmental heuristics in forming impressions about brand personality. Studies 5 and 6 then examine ways to reduce the reliance on the age stereotypes.

Study 4: Age Stereotypes as Judgmental Heuristics

Study 4 tests Hypothesis 3, which predicts that the positive relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brands is likely to be stronger when the decision making is fast versus slow. Participants are more (vs. less) likely to rely on age stereotypes to form brand personality impressions when the decision making is automatic, quick, and effortless (vs. controlled, fast, and effortful).

Method and Procedure

Five hundred and seven U.S. participants (mean age = 36.1 years, 51.5% females) were recruited from Amazon's Mechanical Turk for a nominal payment. Participants were randomly assigned to one of eight conditions of 2 (product category: virtual reality headset and chocolates) \times 2 (processing speed: fast and slow) \times 2 (presentation order: Brand A established first and Brand A young first) between-subjects design (see Appendix H). Participants were told that they would be participating in two unrelated

studies. In the first study, following Inbar, Botti, and Hanko (2011), participants read a paragraph of a research article that manipulated processing speed. In the slow processing speed condition, participants read the research article entitled “Slow is Accurate.” They read “Recent psychological research has shown that people make better choices when they take more time and effort. Taking your time leads to making the best choice possible. It is important to think over things carefully. Therefore, for the next question, a slow response time will be critical. We ask you to take as much time as needed to think carefully about your choice, and then respond. Fully consider the available options before making your selection.” In the fast processing speed condition, participants read a research article entitled “Fast is Accurate.” They read “Recent psychological research has shown that people make better choices when they decide quickly and effortlessly. A quick response leads to making the best choice possible. It is important to go with your first reaction or feelings. Therefore, for the next question, a quick response time will be critical. We ask you to take as little time as possible to think quickly about your choice, and then respond. Quickly consider the options and immediately make your selection.” Participants were then given a choice task that was unrelated to the brand preference study.

The second study involved a shopping simulation similar to the earlier studies where participants saw a picture of the product category and then made a choice between an established brand and a young brand. As in Study 3, we measured participants’ impressions of brand personality dimensions: stableness ($\alpha = .88$), dynamism ($\alpha = .87$), and carelessness ($r = .80$). For each brand, the fourteen traits were randomly presented. Perceptions of product category innovativeness ($\alpha = .87$) and demographic information

were measured as in Study 1. As a check for the processing speed manipulation, we measured the time taken to answer the brand choice question. The time taken to answer was log-transformed to account for the non-normality of the response time data (skewness = 10.39, SE = .108).

Results and Discussion

Checks

A 2×2×2 ANOVA on perceptions of product category innovativeness revealed only a main effect of product category as participants rated the virtual headset category to be more innovative compared to chocolates (M 's = 5.76 vs. 4.52; $F(1, 499) = 138.40, p < .001, \eta_p^2 = .22$). No other effects were significant (all p 's > .10). Another 2×2×2 ANOVA on the log-transformed time taken revealed a significant effect of processing speed as participants took longer to respond in the slow condition compared to the fast condition (M 's = 2.53 vs. 1.98; $F(1, 499) = 57.50, p < .001, \eta_p^2 = .10$) and a marginal effect of product category ($p = .073$). No other effects were significant (all p 's > .147). The manipulations thus worked as intended.

Brand Choice

Since presentation order and its interactions were not significant, a logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, processing speed, and the two-way interaction as the independent variables revealed a significant effect of product category as participants' preference for the young (vs. established) brand was higher in the virtual reality headset category (57.3%) than in the chocolate category (31.8%; $\beta = 0.61, SE = .26, \text{Wald } \chi^2 = 5.45, \text{Exp}(\beta) = 1.84, p =$

.020). Although the effect of processing speed was not significant ($p = .113$), the main effect of product category was qualified by a significant interaction between product category and processing speed ($\beta = 0.87$, $SE = .37$, Wald $\chi^2 = 5.40$, $Exp(\beta) = 2.38$, $p = .020$). The preferences for the younger brand were more polarized across the virtual reality headset category (62.1%) and the chocolate category (27.2%) when the processing speed was fast relative to the preferences for the younger brand across the two categories (51.6% and 36.7% in the virtual reality headset and chocolate category, respectively) when the processing speed was slow (see Figure 6). Importantly, the stereotype consistent preferences across both product categories (i.e., younger brand in virtual reality headset and older brand in chocolates) were significantly higher when the processing speed was fast versus slow (67.2% vs. 57.44%; $z = 2.26$, $p = .024$). These data thus support Hypothesis 3 and the prediction that the relationship between perceptions of product category innovativeness and preferences for younger brands is likely to be stronger when the processing speed is fast versus slow. Said differently, the findings suggest that individuals rely on the age stereotype heuristic more when the decision making is fast compared to slow.

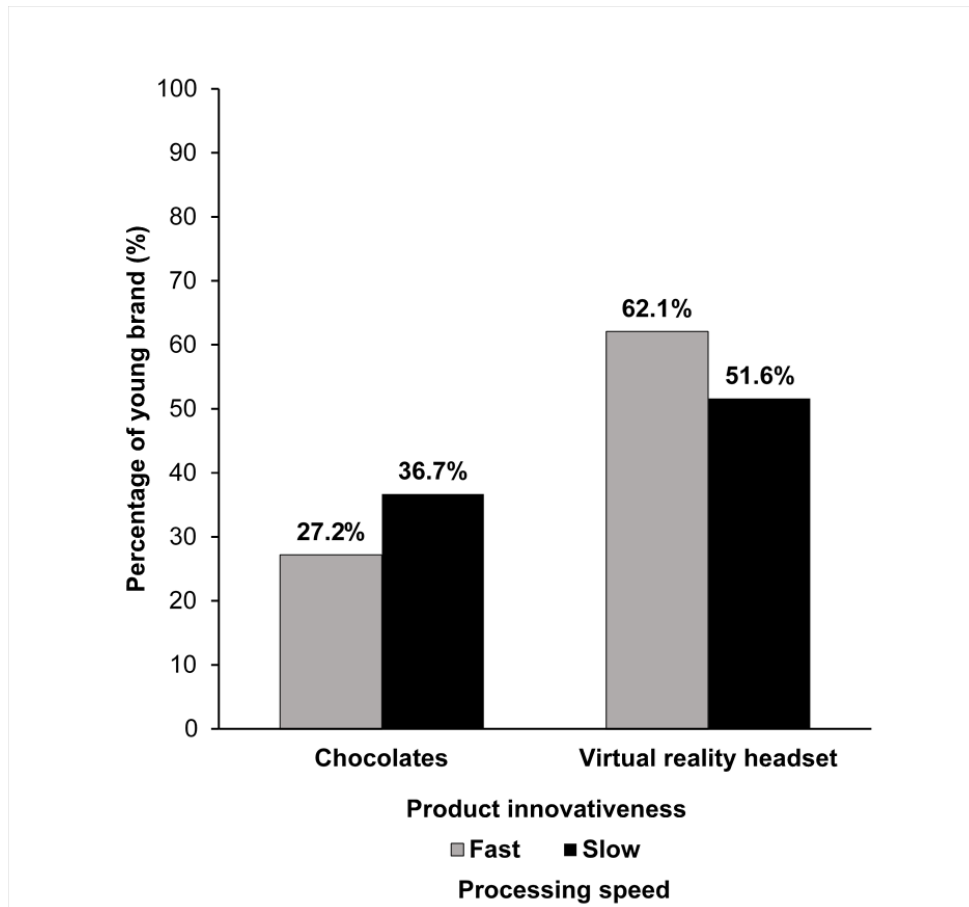


Figure 6. Essay 2 Study 4: Choice Proportion of Young Brand as a Function of Processing Speed

Brand Personality

A *t*-test for each of the three personality dimensions revealed that the established (vs. younger) brand was rated higher in stableness (M 's = 5.43 vs. 4.03; $t(506) = 16.75$, $p < .001$, $d = .74$), but lower in the dynamism (M 's = 3.81 vs. 5.27; $t(506) = 19.98$, $p < .001$, $d = .89$) and carelessness (M 's = 2.98 vs. 3.21; $t(506) = 3.67$, $p < .001$, $d = .16$).

Hayes' (2017) parallel multiple mediator test (PROCESS 4) with brand choice as the dependent variable, product category as the independent variable, and the difference score (old – young) for the personality dimensions of stableness, dynamism, and carelessness as parallel multiple mediators, showed that the indirect effect of product category innovativeness on brand choice was significant through stableness (indirect effect: $\beta = 0.74$, $SE = .21$, $CI\ 95\% = [.370, 1.196]$), dynamism (indirect effect: $\beta = 0.24$, $SE = .13$, $CI\ 95\% = [.007, .512]$), and carelessness (indirect effect: $\beta = 0.16$, $SE = .07$, $CI\ 95\% = [.030, .324]$). The total indirect effect was also significant (total indirect effect: $\beta = 1.13$, $SE = .26$, $CI\ 95\% = [.680, 1.713]$). The data thus provide support for our reasoning that brand personality impressions based on age stereotypes underlie the effects of product category innovativeness on brand preferences, particularly when the decision is automatic, quick, and effortless.

Consistent with the dual processing theories of information processing (e.g., Kahneman 2011), Study 4 demonstrates that individuals are more reliant on age stereotypes to form impressions of brand personality when the brand choice is quick and effortless. However, the reliance on age stereotypes attenuates when the brand choice is slow and effortful. This study measured the reduced number of brand traits from Study 2 by using the same product categories and found significant mediating effects of brand

personality, including the unexpected dimension. Given that reliance on age stereotypes may lead to an implicit bias in how consumers form impressions of brand personality, Studies 5 and 6 examine factors that may reduce such reliance.

Study 5: Role of Stereotype Inconsistent Information

Study 5 tests Hypothesis 4, which predicts that the positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is likely to be attenuated when brands provide information that is counter to age stereotypes. The rationale is that providing information that is inconsistent with the age stereotypes is likely to lead to more controlled and effortful information processing compared to when no information is provided. From a managerial perspective, stereotype inconsistent information can be provided via brand taglines (or other brand communication), which may help in reducing consumers' reliance on age stereotypes to form brand personality impressions and thus influence brand preferences.

Study 5 also explores the extent to which implicit theories of the self, or consumer beliefs about the malleability of personality traits, affect the use of age stereotypes in forming brand personality impressions. Research suggests that most consumers are either entity theorists, who believe that personality traits are fixed and cannot be changed, or incremental theorists, who believe that traits are dynamic and can be changed with time and effort (Dweck, Chiu, and Hong 1995; Levy, Stroessner, and Dweck 1998). For example, research in this domain suggests that entity theorists believe that a person's intelligence, creativity, and morality are fixed and will always remain the same, whereas incremental theorists believe that these traits may change over time and with effort (Chiu, Hong, and Dweck 1997; Levy et al. 1998). Said differently, entity theorists are more

likely than incremental theorists to rely on personality traits in their evaluations and predictions (Chiu et al. 1997). In a branding context, Yorkston, Nunes, and Matta (2010) reported that evaluations of brand extensions were higher for incremental theorists than entity theorists. Following this reasoning, it is possible that entity theorists are more likely to use the brand personality impressions based on age stereotypes in their brand preference than incremental theorists. Study 5 thus explores whether preferences for established (vs. younger) brands are more polarized for entity theorists than incremental theorists when perceptions of product category innovativeness is low (vs. high).

Method and Procedure

Six hundred and sixty-four U.S. participants (mean age = 38.2 years, 57% females) were recruited from Amazon's Mechanical Turk for a nominal payment. Participants were randomly assigned to one of sixteen conditions of a 2 (product category: dried tea leaves and home security camera) \times 2 (implicit theory salience: entity and incremental) \times 2 (brand tagline: none and stereotype inconsistent) \times 2 (presentation order: Brand A established first and Brand A young first) between-subjects design (see Appendix I). To extend the generalizability of the findings, we used different product categories. Based on Study 1 findings, we expected that perceptions of product category innovativeness would be relatively low (vs. high) for dried tea leaves (vs. home security cameras). The YOE for these categories were identical to Study 1.

As in Study 4, participants were told that they would be participating in two unrelated studies. In the first study, participants were asked to read a paragraph of a research article supporting either entity theory or incremental theory (Chiu et al. 1997; Park and John 2012) and write a short essay describing the article's viewpoint (see

Appendix I). The objective was to make salient either entity theory or incremental theory. The second study involved a shopping simulation similar to the earlier studies where participants saw a picture of the product category and then made a choice between an established brand and a young brand. The brand tagline was either not provided or provided alongside the YOE. The tagline absent condition was similar to the earlier studies and represented the control condition. However, when the tagline was present, it was counter to the age stereotype. For dried tea leaves (home security camera), the tagline for the established brand was “144 (33) years of constant innovation,” whereas the tagline for the young brand was “Staying true to its roots.”

As in Study 3, we measured participants’ impressions of brand personality dimensions: stableness ($\alpha = .88$), dynamism ($\alpha = .87$), and carelessness ($r = .64$). For each brand, the fourteen traits were randomly presented. Perceptions of product category innovativeness ($\alpha = .88$) and demographic information were measured as in Study 1. In order to check the implicit theory salience manipulation, participants were asked, “To what extent do you believe that a person’s traits or characteristics are stable?” (1 = Not at all stable; 7 = Very stable).

Results

Initial analyses revealed that presentation order and its interactions were not significant for most of the measures. The analyses reported here are thus aggregated over the two presentation order conditions.

Checks

A 2×2×2 ANOVA on perceptions of product category innovativeness revealed a main effect of product category as participants rated the home security camera to be a

more innovative product category compared to dried tea leaves (M 's = 5.68 vs. 4.26; $F(1, 656) = 215.38, p < .001, \eta_p^2 = .25$), a main effect of brand tagline as participants' perceptions of product category innovativeness were higher when the tagline was stereotype inconsistent compared to no tagline (M 's = 5.12 vs. 4.81; $F(1, 656) = 10.26, p = .001, \eta_p^2 = .02$), and a marginally significant two-way interaction between product category and brand tagline ($F(1, 656) = 3.20, p = .074, \eta_p^2 = .01$). No other effects were significant (all p 's $> .577$). Another $2 \times 2 \times 2$ ANOVA on the implicit theory measure revealed a main effect of implicit theory salience as participants' beliefs that a person's traits or characteristics are stable were higher in the entity condition than in the incremental condition (M 's = 4.54 vs. 4.28; $F(1, 656) = 5.97, p = .015, \eta_p^2 = .01$). No other effects were significant (all p 's $> .31$).

Brand Choice

A logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, implicit theory salience, brand tagline, the three two-way interactions, and the three-way interaction as the independent variables revealed a significant effect of product category as preference for the younger (vs. established) brand was significantly higher in the home security camera category (45.5%) than in the dried tea leaves category (16.8%; $\beta = 1.73, SE = .34, \text{Wald } \chi^2 = 26.17, \text{Exp}(\beta) = 5.61, p < .001$). Although no other effects were significant (all p 's $> .159$), the main effect of product category was qualified by a significant two-way interaction between product category and brand tagline ($\beta = -1.20, SE = .52, \text{Wald } \chi^2 = 5.47, \text{Exp}(\beta) = 0.30, p = .019$). Preferences for the younger brand across the home security camera category

(60.1%) and dried tea leaves category (16.4%) were more polarized when there was no tagline relative to the preferences for the younger brand (30.9% in the home security camera category and 17.3% in the dried tea leaves category) when the tagline was stereotype inconsistent (see Figure 7). Further, the stereotype consistent preferences across both product categories (i.e., younger (older) brand in the home security camera (dried tea leaves) category) were significantly lower when the tagline was stereotype inconsistent than when there was no tagline (57.3% vs. 72.2%; $z = 4.01, p < .001$). However, the shift in brand preferences from the younger brand to the established brand was in the home security camera category compared to almost no shift for the established brand in dried tea leaves category. While the data support Hypothesis 4 and the prediction that the positive relationship between perceptions of product category innovativeness and preference for younger brands is likely to be attenuated when brands provide stereotype inconsistent information, there is an asymmetric effect such that there is an upside for established (vs. younger) brands to provide stereotype inconsistent taglines. Said differently, although younger brands may be preferred in product categories perceived to be innovative, established brands can overcome this disadvantage by providing information that is inconsistent with the age stereotypes associated with older brands.

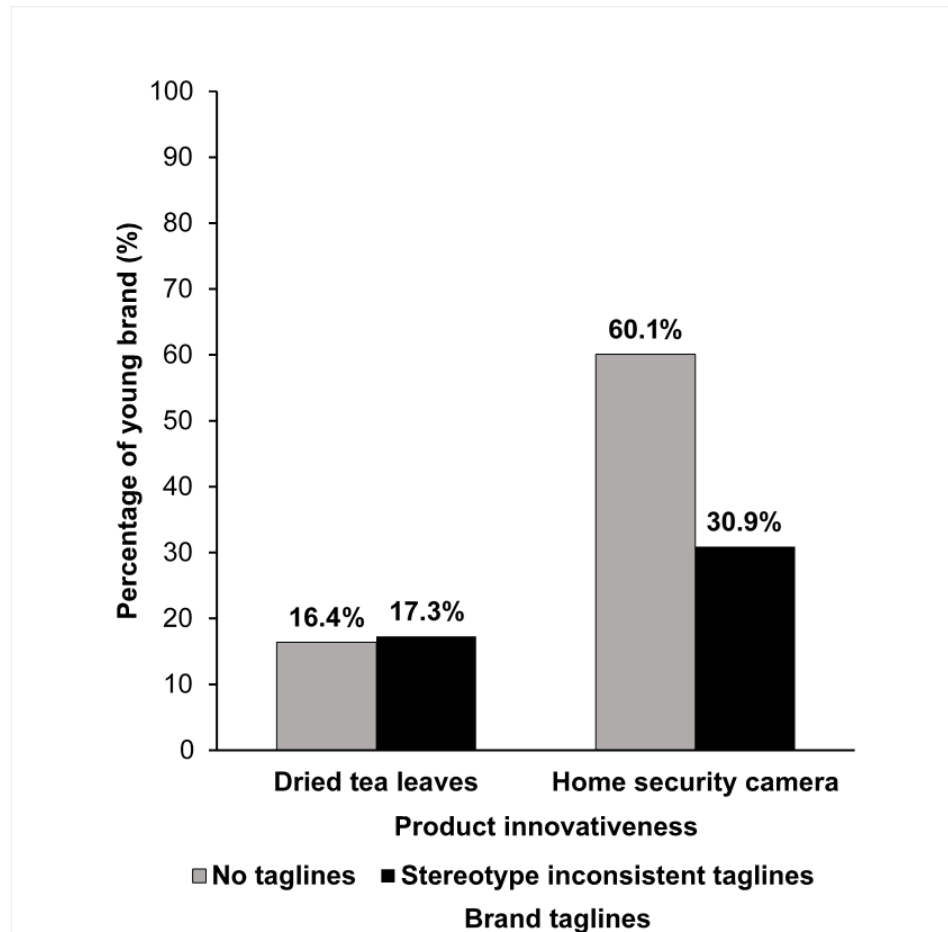


Figure 7. Essay 2 Study 5: Choice Proportion of Young Brand as a Function of Brand Taglines

Brand Personality

A *t*-test for each of the three personality dimensions revealed that the established (vs. younger) brand was rated higher in stableness (M 's = 5.73 vs. 3.95; $t(663) = 25.74$, $p < .001$, $d = 1.00$), but lower in the dynamism (M 's = 3.36 vs. 4.97; $t(663) = 23.98$, $p < .001$, $d = .93$) and carelessness (M 's = 2.42 vs. 2.82; $t(663) = 7.23$, $p < .001$, $d = .28$).

Hayes' (2017) parallel multiple moderated mediation test (PROCESS 7) was run with brand choice as the dependent variable, product category as the independent

variable, brand tagline as the moderator, and the difference score (old – young) for the brand personality dimensions of stableness, dynamism, and carelessness as parallel multiple mediators. Overall, the results support a moderated mediation account as the confidence interval for the estimate of the index of moderated mediation did not include zero for the stableness ($\beta = -1.13$, $SE = .36$, 95% CI $[-1.94, -.526]$) and carelessness ($\beta = -0.38$, $SE = .17$, 95% CI $[-.755, -.109]$), but the index was not significant for the dynamism dimension ($\beta = -0.15$, $SE = .23$, 95% CI $[-.636, .315]$). Specifically, the indirect effect of product category on brand choice was significant through the stableness dimension when there was no brand tagline ($\beta = 1.02$, $SE = .28$, CI 95% = $[.540, 1.659]$) but not when the brand tagline was stereotype inconsistent (CI 95% = $[-.573, .326]$). Similarly, the indirect effect of product category on brand choice was significant through carelessness when there was no brand tagline ($\beta = 0.41$, $SE = .14$, CI 95% = $[.170, .737]$) but not when the brand tagline was stereotype inconsistent (CI 95% = $[-.159, .225]$).

Discussion

Study 5 provides further support for the relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brand. Participants' preferences for the younger brand were higher in the home security camera category than in the dried tea leaves category. Study 5 also suggests that brand preferences for the established/young brand did not vary significantly across entity theorists and incremental theorists. Despite the success of the manipulation check, it is possible that the implicit theory induction was not strong enough. We leave this as an area for future research.

Importantly, Study 5 supported Hypothesis 4, which predicted that providing information that was inconsistent with the age stereotypes would attenuate the relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brands. In this study, we employed a reduced number of brand traits from Study 2 by using different product categories and showed significant mediating effects of brand personality that were not in the same dimensions found in the previous study. The moderated mediation results suggest that providing stereotype inconsistent taglines (vs. no taglines) reduced reliance on age stereotypes and associated brand personality dimensions, thereby reducing the extent to which brand preferences were consistent with age stereotypes. Study 5 also highlights the malleability of the age stereotypes and the nuanced asymmetry that while an established brand can overcome the age stereotype by providing a stereotype inconsistent tagline, a similar pattern does not hold for younger brands. Despite the interesting theoretical and managerial implications, it is important to replicate these findings.

Study 6: Stereotype Consistent Versus Inconsistent Taglines

Study 6 tests Hypothesis 4 and examines the robustness of the findings of Study 5. It differed from Study 5 in several important ways. First, stereotype inconsistent brand taglines were compared to stereotype consistent taglines rather than to a control with no taglines. Second, Study 6 was a laboratory study with undergraduate students and was conducted in small groups. Third, participants in Study 6 had a chance of obtaining the product of their choice after the study. Fourth, as in studies 2 and 4, in order to be more relevant for the undergraduate student population, we used virtual reality headsets and chocolates as the two product categories representing high and low perceptions of

product category innovativeness, respectively. Fifth, to generalize the findings beyond the taglines used in Study 5, Study 6 used different taglines.

Method and Procedure

Four hundred and thirty-nine participants (42.4% females) from a large public university in the U.S. volunteered to participate in the study in exchange for course credit. Participants were randomly assigned to one of eight conditions of a 2 (product category: virtual reality headset and chocolate) \times 2 (brand tagline: stereotype inconsistent and consistent) \times 2 (presentation order: Brand A established and Brand B established) between-subjects design (see Appendix J). Similar to the earlier studies, participants saw a picture of the product category and then made a choice between an established brand and a young brand. They were informed that some of them will be selected to receive the brand that they choose in each of the two product categories. Although participants who received the virtual reality headset or the box of chocolates believed that they received the brand of their choice, in actuality they were all given the same brand.

The brand tagline was either inconsistent or consistent with the age stereotype of the brand and was provided alongside the YOE. For both product categories, the two taglines used were “At Brand A (B), we are committed to unwavering consistency. We constantly ask ourselves how our rock solidness will fit your lifestyle” and “At Brand B (A), we are committed to innovation. We constantly ask ourselves how we can adapt to fit your evolving lifestyle.” While the first tagline was consistent (inconsistent) with the age stereotype of an established (a young) brand, the second tagline was consistent with the age stereotype of a young (an established) brand. In addition to brand choice, participants were asked to recall the tagline and respond to two seven-point items ($r = .84$, first item

was reverse scaled): “Which of the two brands is committed to consistency?” and “Which of the two brands is committed to innovation?” (1 = Definitely Brand A; 7 = Definitely Brand B). Perceptions of product category innovativeness ($\alpha = .86$) and demographic information were measured as in Study 1.

Results and Discussion

Checks

A $2 \times 2 \times 2$ ANOVA on perceptions of product category innovativeness revealed only a main effect of product category as participants rated the virtual headset to be a more innovative product category compared to chocolate (M 's = 5.49 vs. 3.98; $F(1, 431) = 161.32, p < .001, \eta_p^2 = .27$). No other effects were significant (all p 's $> .235$). A 2×2 ANOVA (accounting for order and tagline) on the tagline measures revealed only a main effect of brand tagline as participants rated Brand B (vs. Brand A) to be more committed to innovation (M 's = 6.30 vs. 2.25; $F(1, 435) = 757.74, p < .001, \eta_p^2 = .64$). No other effects were significant (all p 's $> .67$).

Brand Choice

Since presentation order and its interactions were not significant, a logistic regression with brand choice (young = 1, old = 0) as the dependent variable, product category, brand tagline, and the two-way interaction as the independent variables revealed significant effects of product category ($\beta = 1.67, SE = .33, \text{Wald } \chi^2 = 26.40, \text{Exp } (\beta) = 5.32, p < .001$) and brand tagline ($\beta = -1.35, SE = .30, \text{Wald } \chi^2 = 19.98, \text{Exp } (\beta) = 0.26, p < .001$). These main effects were qualified by a significant two-way interaction between product category and brand tagline ($\beta = -1.40, SE = .46, \text{Wald } \chi^2 = 9.42, \text{Exp } (\beta) = 0.25, p = .002$).

As before, preferences for the younger (vs. established) brand were significantly higher in the virtual reality headset category (55.5%) than the chocolate category (35.7%). Importantly, preferences for the younger brand across the virtual reality headset (84.4%) and chocolate categories (50.5%) were more polarized when the tagline was stereotype consistent relative to the preferences for the younger brand (25.7% in the virtual reality headset and 20.9% in the chocolate categories) when the tagline was stereotype inconsistent (see Figure 8). Despite the unexpectedly high preference for the younger brand in the chocolate category when the taglines were stereotype consistent, as in Study 5, the stereotype consistent preferences across both product categories (i.e., younger (older) brand in the virtual reality headset (chocolate) category) were significantly higher when the tagline was stereotype consistent than inconsistent (66.82% vs. 52.51%; $z = 3.06, p = .002$). These data thus provide further support for Hypothesis 4. While the stereotype consistent taglines appear to reinforce age stereotypes, the stereotype inconsistent taglines shift the brand preferences from the younger brand to the established brand for both product categories. As in Study 5, there is an asymmetric effect such that there is an upside for established brands to provide stereotype inconsistent taglines, particularly in product categories perceived to be high in innovativeness. In contrast, there is no benefit for younger brands in providing stereotype inconsistent information in product categories perceived to be low in innovativeness. To explain this phenomenon, the finding suggests to examine whether adding innovation to the brand image of the established brand will be more believable than adding tradition to the brand image of the young brand in the manipulation.

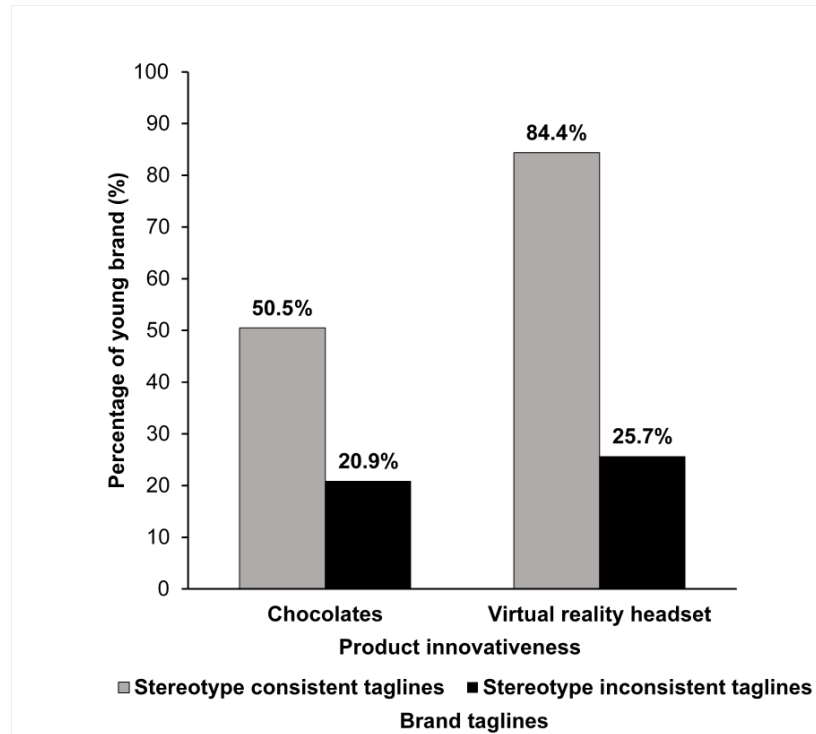


Figure 8. Essay 2 Study 6: Choice Proportion of Young Brand as a Function of Brand Taglines

General Discussion

There are numerous examples of brands, both established and young, emphasizing their age in marketing communications or highlighting it on their logos alongside their brand names. As with other extrinsic brand attributes, brands are presumably using age or YOE to create and shape brand associations that make up the brand image. The limited research on the effects of brand age and brand heritage, however, suggests that perceptions of quality and purchase intentions are higher for established brands suggesting that *old is gold* (e.g., Desai et al. 2008). This research takes a contingent perspective on the effects of brand age and identifies conditions under which younger

brands may be preferred to established brands, particularly when brand names are relatively unfamiliar and the other intrinsic cues may be similar.

First, we demonstrate that consumer preferences for a relatively young brand increase with their perceptions of product category innovativeness. Studies 1 through 6 show that the extent to which consumers perceive the category to have changed in the past, and is expected to change in the future, the higher the preference for younger (vs. established) brands. Consistent with the *old is gold* characterization, preferences for an established brand are higher for product categories perceived to be stable and static. In contrast, preferences for younger brands are higher for product categories perceived to be dynamic. Although our reasoning suggests differences across product categories, Study 3 demonstrated that perceptions of innovativeness may influence brand preferences even for the same product category. Theoretically, we take a consumer perspective in examining the role of product innovativeness rather than the firm perspective assumed in much of the previous literature (e.g., Banbury and Mitchell 1995).

Second, we shed insight into the underlying process by suggesting that consumers rely on age stereotypes to form brand personality impressions based on brand age (Aaker 1997; Posthuma and Campion 2009). Established brands are perceived to be stable, mature, and persevering, whereas younger brands are perceived to be modern, dynamic, and innovative. Given that the personality of established brands matches that of product categories perceived to be stable or low in innovativeness, whereas the personality of younger brands matches that of product categories perceived to be dynamic or high in innovativeness, consumers prefer established (younger) brands when perceptions of product category innovativeness are low (high). Study 2 showed that

consumers use age stereotypes to form brand personality impressions, particularly the dimensions of stableness, dynamism, and carelessness. Further, Study 2 showed that the brand impressions of stableness and dynamism underlie brand preferences. While Study 3 did not find evidence for the mediation, studies 4 and 5 provided further support that brand impressions based on age stereotypes underlie the relationship between perceptions of product category innovativeness and brand preferences. In future research, the discrepancy in mediation results should be discussed to bolster the robustness of the mediating effects of brand personalities in order to explain the relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands.

Across four studies (Studies 2–5) that we tested the effect of brand personality, we conducted single-paper meta-analyses (SPM), comparing product categories (low innovative product category = -1; high innovative product category = 1) for each dimension of brand personalities (Mcshane and Böckenholt 2017). An SPM of our studies estimated the effect at -0.74 (95% CI: -0.94 – -0.55), indicating that the perceived stableness was greater for the established brand than for the young brand. I^2 was estimated at 91% (95% CI: 83%–95%), suggesting that heterogeneity was very high (Higgins et al. 2003; Higgins and Thompson 2002). This large heterogeneity prompted us to reflect upon differences among the studies. For the estimate of dynamism, the confidence interval included zero (95% CI: -0.53–0.26) and failed to attain statistical significance. For the estimate of carelessness, the analysis presented the effect at 0.47 (95% CI: 0.21–0.73), indicating that the perceived carelessness was lower for the established brand than for the young brand. I^2 was estimated at 65% (95% CI: 21%–

84%), suggesting that heterogeneity was low to high. We believe the analyses suggest an avenue for future research to assess whether the results hold more generally through the same experimental manipulations of product categories and measurements of brand personalities across studies.

Third, consistent with previous research (Bodenhausen and Wyer 1985), we show that consumers are more likely to rely on age stereotypes to form brand impressions when the decision is quick and effortless. The reliance on age stereotypes is thus automatic and instinctive. However, when consumers are asked to slow down the decision, the reliance on age stereotypes is attenuated as their information processing is more controlled (Blair and Banaji 1996; Bodenhausen 1990). Consistent with our reasoning, Study 4 demonstrated that brand preferences were more consistent with the age stereotypes (i.e., preference for younger (established) brand when perceptions of product category innovativeness are high (low)) when the processing speed was fast than when slow. The findings suggest that the implicit bias toward established (younger) brands based on perceptions of product category innovativeness can be attenuated by getting consumers to expend more cognitive resources.

Fourth, we highlight the malleability of the brand impressions based on age stereotypes by showing that stereotype inconsistent information attenuates the relationship between perceptions of product category innovativeness and brand preferences. From a theoretical perspective, stereotype inconsistent information may lead consumers to engage in more effortful and controlled information processing because of the discrepancy between age based brand impressions and the stereotype inconsistent information. From a practical perspective, providing a stereotype inconsistent brand

tagline is within the purview of brand managers that can influence consumers' information processing. Studies 5 and 6 show that brand preferences are less consistent with the age stereotypes when stereotype inconsistent taglines are provided than when no (or stereotype consistent) taglines are provided. The results suggest that stereotype inconsistent taglines reduce reliance on the age stereotypes thus attenuating the relationship between perceptions of product category innovativeness and brand preferences.

Studies 5 and 6 also suggest an interesting nuance in the findings. The findings show that while established brands may benefit from providing a stereotype inconsistent tagline, the upside for younger brands is limited. Preferences for established brands increased even in product categories perceived to be high in innovativeness (e.g., virtual reality headset) when there was a tagline inconsistent with its age stereotype. However, younger brands could not make similar inroads into product categories perceived to be low in innovativeness (e.g., chocolates) by providing stereotype inconsistent taglines. From a theoretical perspective, the findings suggest that established brands may credibly convey an image of innovativeness along with stability, a combination of change and continuity (Preece, Kerrigan, and O'Reilly 2018). It is thus easier for an established brand to "break" out of its stereotypical image by providing stereotype inconsistent taglines. In contrast, it is difficult for younger brands, by virtue of their limited longevity, to convey an image of stableness and innovativeness in a credible manner. It is perhaps not surprising given that, by definition, a brand may have to be in existence for a critical threshold number of years to be able to convey an impression of stableness credibly.

From a managerial perspective, our research identifies conditions under which an established brand will be preferred and when a younger brand will be preferred.

Returning to the illustration in the introduction, the tourist in the Netherlands is likely to prefer the established brand of chocolates, whereas the consumer shopping for a virtual reality headset is likely to prefer the younger brand. Our research suggests strategies for competing against other brands which are contingent on perceptions of product category innovativeness. The brand manager of the younger brand of chocolates in the Netherlands can only emphasize and actively communicate a modern, innovative, and trendy image. However, the brand manager of the established brand of virtual reality headset can and needs to convey an image of dynamism and innovativeness by providing a stereotype inconsistent tagline to compete with the younger brand that is “naturally” perceived to be modern, dynamic, and innovative. Such a strategy is exemplified by BMW’s tagline of “100 Years of Innovation.”

In conclusion, our research contributes to our understanding of how brand attributes shape and form brand impressions, thereby influencing brand preferences. Specifically, we contribute to the limited research on the effects of brand age which documents a relatively one-sided view that *old is gold*. There are however several avenues for future research. First, although brand age as an extrinsic cue may be less diagnostic when the brand names are familiar, it is possible that emphasizing age along with brand name may have effects under certain conditions. Second, consumers’ own age may affect the reliance on age stereotypes and thus brand preference. Third, in addition to brand taglines, brands could utilize other strategies (e.g., celebrity spokesperson) to convey a specific brand impression that may be consistent or inconsistent with their age

stereotypes. Fourth, examining brand age along with other brand attributes may help in better understanding the conditions under which age of the brand should and should not be emphasized.

CHAPTER 4

ESSAY 3: CONSUMERS' NEED FOR UNIQUENESS AND THE DESIRE TO SEEK NOVELTY AS MODERATORS OF THE EFFECT OF BRAND AGE ON CONSUMERS' BRAND CHOICE

Brands are a firm's most important assets, and they play a critical role when consumers judge the values of products. As a consequence, marketers have focused on creating brand awareness and shaping unique brand images, or "perceptions about a brand as reflected by the brand associations held in consumer memory" (Keller 1993, p. 3).

A significant part of a brand image comes from extrinsic or non-product-related brand attributes. For example, an attribute that firms often emphasize is a brand's age or year of establishment (YOE). Research into brand heritage, which encompasses track record, longevity, core values, use of symbols, and a firm's belief that its history is important (Balmer and Burghausen 2015; Urde, Greyser, and Balmer 2007), captures some of the essence of brand age. Numerous brands across a range of products and services have their YOE printed alongside the brand name in the logo. Examples include Founders Insurance ("Since 1901"), Guinness ("Estd. 1759"), Lindt ("Master Chocolatier Since 1845"), and Rayban ("Genuine since 1937").

All of these are relatively established brands. By contrast, Etch cosmetics ("Estd. 2016"), Dyezz Surveillance ("Since 2001"), Biscotti Brothers ("Est'd 2003"), Darling Brew ("Since 2010"), Boba Guys ("Est. 2011"), and CrossFit Leipzig ("Est. 2013") are relatively young brands that also highlight their YOEs and emphasize their age in

marketing. In light of previous research, however, we might ask whether young brands should highlight their age.

Although much is known about the effects of many extrinsic cues, such as the shapes (Jiang et al. 2016) and colors of logos (Labrecque and Milne 2012), original manufacturing locations (Newman and Dhar 2014), and countries of origin (Maheswaran 1994), considerably less is known about the effects of brand age on consumers. More specifically, very little is known about whether consumers prefer younger brands (Desai et al. 2008; Pizzi and Scarpi 2019). In this research, we examine the effects of brand age on consumer preferences and identify the conditions under which an established brand or a relatively young brand is preferred. In particular, we examine the relationship between perceived innovativeness and preferability according to consumers' individual traits.

Research on symbolic consumption has highlighted the importance of customizing strategies to different consumers in response to people's need for uniqueness (Berger and Heath 2007; White and Argo 2011), self-construal (White and Argo 2011), implicit theories (Yorkston, Nunes, and Matta 2010), and novelty seeking (Moreau and Dahl, 2005; Sääksjärvi and Hellén 2019). We examine the impact of significant differences among consumers, the need for uniqueness and desire for novelty, on their brand preferences.

If consumers form different relationships with brands on the basis of their distinct personalities (Aaker et al. 2004; Fournier 1998) and also rely on widely held beliefs and stereotypes about age and human characteristics, we would expect them to form personality impressions of brands based on brand age, particularly when the brand name is relatively unknown. Therefore, we expect perceptions of innovativeness in product

category to increase consumers' preferences for young brands, with this effect moderated by novelty seeking and need for uniqueness. In other words, both consumers who seek novelty and consumers who need uniqueness tend to prefer younger brands regardless of their perceptions of product category innovativeness. However, consumers who are less likely to seek novelty or who have a low need for uniqueness tend to prefer younger brands when their perceptions of product category innovativeness are high, but to prefer established brands when these perceptions are low. This work offers several valuable insights into the effects of perceived product category innovativeness, brand personality, and consumer traits on brand preference.

The rest of this essay is organized as follows: The next section outlines research on brand age and perceptions of product category innovativeness. This is followed by a discussion of consumers' need for uniqueness and desire to seek novelty. We then test hypotheses about the effect and the process involved through a series of studies. In Study 1, we examine whether impressions of brand personality based on age stereotypes underlie the relationship between brand preferences and perceptions of product category innovativeness and the moderating effects of need for uniqueness and desire to seek novelty. In Study 2, we examine whether need for uniqueness moderates the relationship between brand preference and perception of product category innovativeness. We also examine the role of the importance of brand personality as a mediator. We conclude by discussing theoretical and managerial implications.

Theoretical Background

Brand Age and Perceptions of Product Category Innovativeness

The literature on brand age suggests that it is used as a signal of a brand's quality, consistency, and reliability (Beck et al. 2016; Desai et al. 2008). However, we take a different approach: rather than focusing on the effects of brand age in terms of perceived quality (Desai, Kalra, and Murthi 2008; Rose et al. 2016; Zhang, Kashmiri, and Cinelli 2019), we examine the link between brand age and impressions of brand personality (Aaker 1997; Aggarwal and McGill 2007) to identify the conditions under which an established or a younger brand is preferred.

Brand personality is defined as “the set of human characteristics associated with a brand” (Aaker 1997, p. 347). Following the idea of “humanizing” brands, we examine the extent to which certain well-developed age stereotypes about humans (see e.g., Posthuma and Campion 2009; Rosen and Jerdee 1976) are used to form impressions of brand “personalities.” For instance, older adults are portrayed as having less motivation, less ability to learn, less propensity for taking risks, and less creativity, and as being harder to train, less flexible, and more resistant to change in the workplace (Posthuma and Campion 2009; Rosen and Jerdee 1976). On the other hand, they are also viewed as more trustworthy, stable, dependable, and reliable (Bal et al. 2011; Posthuma and Campion 2009; Rosen and Jerdee 1976).

As consumers use age stereotypes to form impressions of brand personality, product categories perceived as less innovative are consistently associated with the age stereotypes of older adults, whereas categories perceived as high in innovation match the stereotypes of younger people. In sum, the relationship between perceived product

category innovativeness and preference for younger or older brands is mediated by impressions of brand personality based on age stereotypes.

Consumers' Individual Traits

The literature on brands also suggests that consumers' individual traits are factors that affect their behavior toward brands. Despite the emphasis that previous research has placed on customizing marketing strategies to consumers' distinctiveness (Berger and Heath 2007; White and Argo 2011) and novelty seeking (Moreau and Dahl, 2005; Sääksjärvi and Hellén 2019), research into the effects of individual traits on attitudes toward brands is relatively sparse (Morhart et al. 2015). We attempt to fill this gap by investigating the effects of two individual consumer traits: need for uniqueness and desire to seek novelty.

Need for Uniqueness

Consumers signal their desired identities through the tastes or preferences they display for different products (Belk 1988; Escalas and Bettman 2003). Researchers have defined consumers' need for uniqueness (CNFU) as an individual trait of pursuing differentness from others through the acquisition, use, and disposal of consumer goods for the purposes of enhancing their self-image and social images (Tian, Bearden, and Hunter 2001, p. 50). Individuals fulfill their need for uniqueness to varying degrees (Snyder and Fromkin 1977); they may diverge, choosing options that are preferred only by a small minority (high need for uniqueness) or converge by choosing more popular options (low need for uniqueness) (Berger and Heath 2007).

Although it is beneficial to promote conformity in many cases (Fromkin and Snyder 1980; Simonson and Nowlis 2000; Tetlock, Skitka, and Boettger 1989), high-

uniqueness consumers tend to make unconventional choices when certain product domains signal their identity (Berger and Heath 2007) or when a choice is perceived as socially profitable (Wan, Xu, and Ding 2013). Researchers have described high-uniqueness consumers as more likely to choose products that are scarce and novel (Lynn 1992; Snyder 1992), to prefer consuming products before they are common, and to avoid sharing information (Cheema and Kaikati 2010).

Consistently with this reasoning, we argue that high-uniqueness consumers may be more likely to prefer newer brands that have been in the market for a shorter time and are thus less likely to be commonplace. We expect low-uniqueness consumers to have preferences for young or old brands only in cases of high (or low) perceived product category innovativeness. However, high-uniqueness consumers' preference for young brands remains regardless of their perceptions of innovativeness. Formally,

H1: The positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is likely to be moderated by consumer need for uniqueness. The effect is likely to be stronger for those with low need for uniqueness relative to those with high need for uniqueness.

We test Hypothesis 1 using consumers' need for uniqueness measures in Studies 1 and 2.

Desire to Seek Novelty

Novelty is seen as a fundamental dimension of creativity, which involves uniqueness, originality, uncertainty, and ambiguity (Berlyne 1960; Falchetti 2018; Zhou et al. 2016). In the context of consumer behavior, the desire to seek novelty is defined as an internal drive to gather new information (Hirschman 1980) and explore unfamiliar

environments (Cloninger, Svrakic, and Przybeck 1993; Costa et al. 2014). This novelty-seeking motive is closely associated with curiosity and sensation seeking and drives people to engage in exploratory behaviors (Collins, Litman, and Spielberg 2004; Pearson 1971; Spielberg and Starr 1994; Voss and Keller 1983; Zuckerman et al. 1964). Existing research on consumer innovativeness has focused on novelty-seeking motives and behaviors and correlated them to the early adoption of new products (Manning et al. 1995).

Building on the understanding of the motivations for adoption and innovation, we examine the effect of desire to seek novelty on the relationship between perceptions of product category innovativeness and preferences for younger (vs. established) brands. We propose that the young-brand preferences of low-novelty-seeking people are greater for products of high perceived innovativeness, whereas high-novelty-seeking people prefer young brands regardless of perceived innovativeness. This leads to Hypothesis 2:

H2: The positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is likely to be moderated by the desire to seek novelty. The effect is likely to be stronger for those with low desire relative to those with high desire to seek novelty.

We test Hypothesis 2 using desire to seek novelty measures in Study 1.

Taken together, these two hypotheses help explain how perceived product category innovativeness and consumer traits, such as need for uniqueness and novelty seeking, affect consumers' preferences for younger or more established brands. Our research makes a theoretical contribution to the literature on the effects of brand attributes on brand image and has practical implications for brand managers regarding

how older or younger brands can compete in the marketplace, particularly those consumers are relatively unfamiliar with.

This paper seeks to test the hypotheses, examine consumers' individual traits in both studies, and investigate whether impressions of brand personality based on age stereotypes underlie the relationship between brand preferences and perceptions of product category innovativeness in Study 1.

Study 1: The Mediating Role of Brand Personality Between Product Category Innovativeness and Brand Age and the Effects of Individual Traits

Study 1 examines the positive relationship between consumers' perceptions of product category innovativeness and their preference for younger (vs. established) brands by using brand personality impressions based on age stereotypes as mediators. Also, it tests Hypotheses 1 and 2, which predict the moderating effects of perceptions of product category innovativeness and consumer traits such as novelty seeking and need for uniqueness on consumers' preference for young versus established brands. In other words, consumers who do not seek novelty, as well as consumers who have a low need for uniqueness, may choose younger brands for high (vs. low) perception of product category innovativeness as a way to fulfill their motivation to be unique or desire to seek novelty. Consumers who seek novelty or have a high need for uniqueness may choose young brands for both high and low perception of product category innovativeness.

Method and Procedure

Four hundred and five U.S. participants (mean age = 36.6 years, 51.9% female) were recruited from Amazon's Mechanical Turk for a nominal payment and randomly assigned to one of four conditions in a 2 (product category: virtual reality headset and

chocolates) \times 2 (presentation order: Brand A established and Brand A young) between-subjects design. Participants were told that a new online shopping website was collecting brand preference data to understand their potential customers and provide them with a tailored shopping experience in the future. They were informed that the brand names were disguised for the purpose of the study and were asked to choose between two brands. Participants were shown a picture of the product category and then asked to indicate their brand preference. For example, in the virtual reality headsets category, participants saw a picture of a virtual reality headset and were then asked, “If you were shopping for virtual reality headsets, which brand would you choose to purchase?” (Brand A, Established in 2002 or Brand B, Established in 2018). In order to control for order, half the participants saw Brand A (B) as the established (young) brand while the other half saw Brand A (B) as the young (established) brand. Because of differences in the evolution of the product categories, the YOE for each product category was adjusted to be realistic based on the growth of each category. For example, the YOE for the established brand in the box of chocolates category was 1942 and the YOE for the young brand was 2011, whereas the YOE for the established brand in the virtual headset category was 2002 and the YOE for the young brand was 2018.

In addition to indicating their choice between the established and the young brand, participants were asked to list the thoughts they had while making their choice and rated perceptions of product category innovativeness with three seven-point items ($\alpha = .89$): “I expect that a brand in this product category would bring about innovative change over time,” “This product category has gone through a lot of changes over time,” and “Over time, a brand in this product category would offer dramatic changes in product

features” (1 = Strongly disagree; 7 = Strongly agree). Similar scale items were used by Lee and O’Connor (2003) to measure innovativeness or product superiority to the customer from the perspective of a firm. We adapted and modified the scales to measure product category innovativeness from the perspective of the consumer.

We then measured participants’ impressions of brand personality for both brands. Following Aaker (1997), participants were instructed: “We would like you to think of each brand as if it were a person. This may sound unusual but think of the set of human characteristics associated with each brand. For example, you might think that the human characteristics associated with Pepto Bismol are kind, warm, caring, soothing, gentle, trustworthy, and dependable. The human characteristics associated with Dr Pepper might be non-conforming, fun, interesting, exciting, and off-beat. We are interested in finding out which personality traits or human characteristics come to mind when you think of the brands on the previous page. Please rate the extent to which each of the personality traits describes each brand.” Participants were asked to rate the extent to which each of the personality traits describes each brand on seven-point items (1 = Not at all descriptive; 7 = Extremely descriptive), which were generated based on prior literature on brand age stereotypes (Aaker 1997; Morhart et al. 2015; Guillory 2012; Posthuma and Campion 2009; Rosen and Jerdee 1976; Soto et al. 2011). Participants’ age-based impressions of brand personality for both brands were measured on the three dimensions of stableness, dynamism, and carelessness. We measured stableness with eight traits (competent, efficient, loyal, mature, persevering, responsible, secure, and stable, $\alpha = .93$), dynamism with nine traits (creative, dynamic, flashy, imaginative, innovative, modern, stylish,

trendy, and young, $\alpha = .93$), and carelessness with three traits (careless, irrelevant, and useless, $\alpha = .91$). The twenty traits were presented randomly for each brand.

Next, participants were asked to rate the extent to which they agree with the following statements describing their desire to seek novelty: “How willing are you to seek out novel information?,” “Do you search for the new and different?,” “How willing are you to try new brands?,” and “Do you look for new brands to try?” (1 = Not at all; 7 = Very much). Similar scale items were used by Hirschman (1980) to measure inherent novelty seeking, which is a composite set of generalized/abstract questions and specific/concrete questions. We adapted and modified the scales to measure desire to seek novelty from the perspective of consumer brand behavior. In addition, we asked participants to indicate the extent of their agreement with 31 items, which measured CNFU on seven-point scales ($\alpha = .91$; e.g., I collect unusual products as a way of telling people I’m different, 1 = Strongly disagree; 7 = Strongly agree; Tian, Bearden, and Hunter 2001). Finally, participants provided demographic data.

Results

Checks

A 2×2 ANOVA on perceptions of product category innovativeness revealed only a main effect of product category as participants rated virtual reality headset as a more innovative product category than chocolate (M 's = 5.69 vs. 4.46; $F(1, 401) = 103.39, p < .001, \eta_p^2 = .21$). No other effects were significant (all p 's $> .387$).

Brand Choice

A logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, presentation order, and the two-way interaction as the

independent variables revealed a significant effect of product category as preference for the younger (vs. established) brand was significantly higher in the virtual reality headset category (54.9%) than in the chocolate category (31.2%; $\beta = 0.93$, $SE = .29$, Wald $\chi^2 = 10.22$, $\text{Exp}(\beta) = 2.54$, $p = .001$). No other effects were significant (all p 's $> .724$).

Brand Personality

A t -test for each of the three personality dimensions revealed that the established (vs. younger) brand was rated higher in stableness (M 's = 5.32 vs. 4.16; $t(404) = 13.08$, $p < .001$, $d = .65$), but lower in the dynamism (M 's = 3.96 vs. 5.23; $t(404) = 16.15$, $p < .001$, $d = .80$) and carelessness (M 's = 2.72 vs. 2.93; $t(404) = 3.33$, $p = .001$, $d = .17$).

Hayes' (2017) parallel multiple mediator test (PROCESS 4) with brand choice as the dependent variable, product category as the independent variable, and the difference score (old – young) for the personality dimensions of stableness, dynamism, and carelessness as parallel multiple mediators, showed that the indirect effect of product category innovativeness on brand choice was significant through stableness (indirect effect: $\beta = 0.92$, $SE = .24$, $CI\ 95\% = [.493, 1.434]$) and dynamism (indirect effect: $\beta = -0.26$, $SE = .13$, $CI\ 95\% = [-.522, -.026]$), but not carelessness (indirect effect: $\beta = 0.05$, $SE = .04$, $CI\ 95\% = [-.015, .154]$). The total indirect effect was also significant (total indirect effect: $\beta = 0.71$, $SE = .26$, $CI\ 95\% = [.235, 1.262]$). Thus, the results replicate the findings in Essay 2.

Brand Choice and Individual Traits

A logistic regression with product category, presentation order, consumer need for uniqueness, the three two-way interactions, and the three-way interaction as the independent variables revealed a significant effect of product category on preference for

the younger (vs. established) brand; the younger brand preference was significantly higher in the virtual reality headset category than in the chocolate category ($\beta = 3.33$, $SE = 1.09$, $Wald \chi^2 = 9.30$, $Exp(\beta) = 28.04$, $p = .002$). Additionally, the result revealed a significant effect of consumer need for uniqueness ($\beta = 0.72$, $SE = 0.19$, $Wald \chi^2 = 14.29$, $Exp(\beta) = 2.05$, $p < .001$). The main effects were qualified by a significant interaction between product category and consumer need for uniqueness ($\beta = -0.54$, $SE = 0.24$, $Wald \chi^2 = 4.92$, $Exp(\beta) = 0.58$, $p = .027$). No other effects were significant (all p 's $> .328$). We explored this interaction using a spotlight analysis (Aiken and West 1991) at 1 standard deviation above and below the mean of CNFU (see Figure 9). The analysis at one standard deviation below the mean of CNFU indicated that preference for the younger (vs. established) brand was significantly higher in the virtual reality headset category than in the chocolate category ($\beta = 2.05$, $SE = 0.57$, $Wald \chi^2 = 13.18$, $p < .001$). In contrast, the corresponding analysis at 1 standard deviation above the mean of CNFU revealed that product category had no impact on young (vs. established) brand preference ($\beta = 0.50$, $SE = 0.39$, $Wald \chi^2 = 1.59$, $p = .208$). Hypothesis 1 is thus supported.

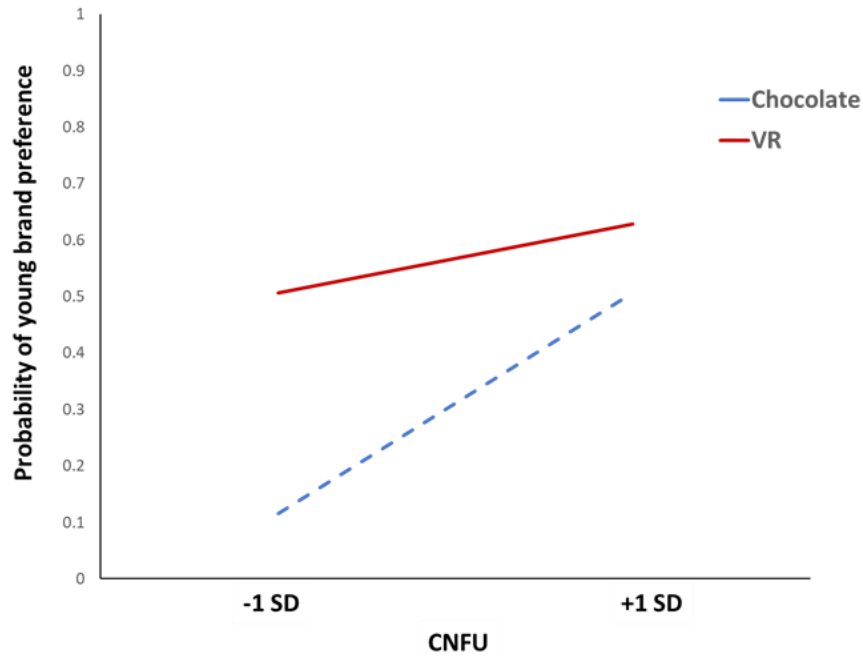


Figure 9. Essay 3 Study 1: Spotlight Analysis Result of CNFU

We conducted another logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, presentation order, the desire to seek novelty, the three two-way interactions, and the three-way interaction as the independent variables. The results revealed a significant effect of product category on preference for the younger (vs. established) brand; the younger brand preference was significantly higher in the virtual reality headset category than in the chocolate category ($\beta = 4.76$, SE = 1.80, Wald $\chi^2 = 7.03$, Exp (β) = 116.75, $p = .008$). Additionally, the result revealed a significant effect of desire to seek novelty ($\beta = 0.83$, SE = 0.25, Wald $\chi^2 = 10.84$, Exp (β) = 2.29, $p = .001$). The main effects were qualified by a significant interaction between product category and desire to seek novelty ($\beta = -0.68$, SE = 0.32, Wald $\chi^2 =$

4.63, $\text{Exp}(\beta) = 2.11, p = .031$). No other effects were significant (all p 's $> .086$). We explored this interaction using a spotlight analysis (Aiken and West 1991) at 1 standard deviation above and below the mean of the desire to seek novelty (see Figure 10). The analysis at one standard deviation below the mean of the desire to seek novelty indicated that preference for the younger (vs. established) brand was significantly higher in the virtual reality headset category than in the chocolate category ($\beta = 1.81, \text{SE} = 0.50, \text{Wald } \chi^2 = 12.96, p < .001$). In contrast, the corresponding analysis at 1 standard deviation above the mean of the desire to seek novelty revealed that product category had no impact on young (vs. established) brand preference ($\beta = 0.38, \text{SE} = 0.41, \text{Wald } \chi^2 = 0.86, p = .352$). Hypothesis 2 is thus supported.

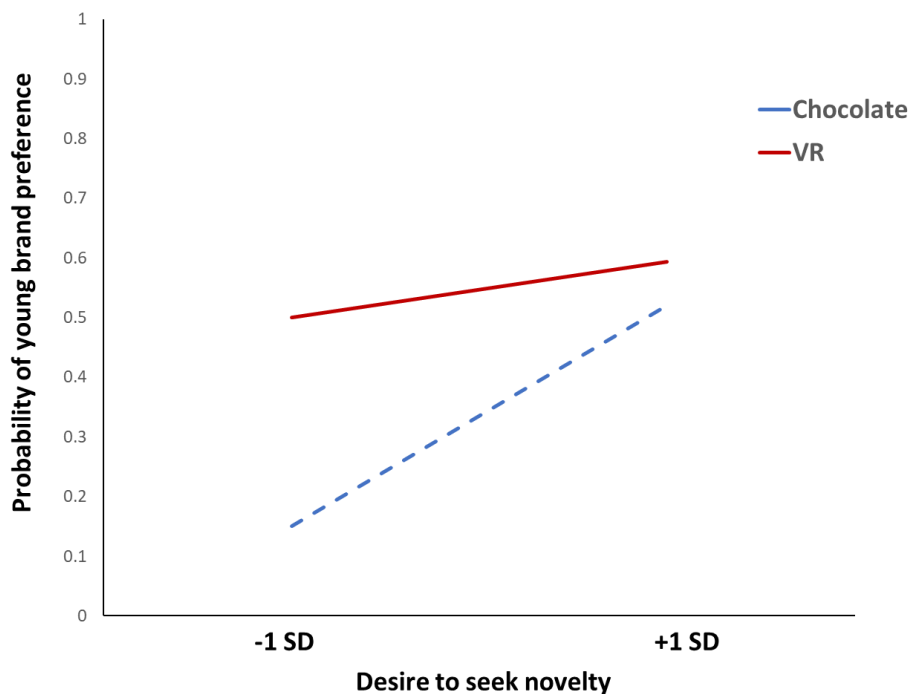


Figure 10. Essay 3 Study 1: Spotlight Analysis Result of the Desire to Seek Novelty

Discussion

Study 1 replicates findings in Essay 2 and demonstrates that preferences for the younger brand were higher in the virtual reality headset category, which was perceived as more innovative, compared to the preferences for the established brand in the chocolate category. Additionally, we found that the positive relationship between perceptions of product category innovativeness and preferences for younger brands is mediated by age-based impressions of brand personality. These results strongly suggest that consumers rely on age stereotypes in forming impressions of brand personality, which then influences brand preferences.

Consistent with Hypotheses 1 and 2, results suggest that the effect of perception of product category innovativeness on consumers' preference for young versus established brands is a function of their individual traits such as the need for uniqueness and the desire to seek novelty. Although perceptions of product category innovativeness have a positive impact on consumer preferences for young brands, this effect is moderated by novelty seeking and need for uniqueness. Findings reveal that both consumers who seek novelty and consumers who have a high need for uniqueness tend to prefer young brands regardless of perceptions of product category innovativeness. However, consumers who do not seek novelty, as well as consumers who have a low need for uniqueness, tend to prefer young brands when perceptions of product category innovativeness are high but prefer established brands when perceptions of product category innovativeness are low.

Study 2: Effects of Consumers' Need for Uniqueness on Brand Preference

In Study 2, we examine the effects of perceptions of product category innovativeness and need for uniqueness on consumers' preference for young versus established brands. We manipulate consumers' need for uniqueness with two levels: high vs. low. Following the concept of consumers' need for uniqueness, consumers' need for uniqueness should reflect individual differences in motivation to stand out. In other words, consumers' need for uniqueness describes counter conformity traits, and the opposite motivation should describe conformity traits. We expect that consumers who have a high need for uniqueness tend to prefer young brands regardless of perceptions of product category innovativeness. However, consumers who have a low need for uniqueness tend to prefer young brands when perceptions of product category innovativeness are high but prefer established brands when perceptions of product category innovativeness are low.

Method and Procedure

Five hundred and four participants (mean age = 36.3 years, 56.5% females) were recruited from Amazon's Mechanical Turk for a nominal payment. Participants were randomly assigned to one of conditions of a 2 (need for uniqueness: high vs. low) \times 2 (product category: chocolate vs. VR) \times 2 (presentation order: Brand A established and Brand A young) between-subjects design. The YOE for these categories were identical to Study 1. The need for uniqueness manipulation was revised from Cheema and Kaikati (2010) and Moldovan, Steinhart, and Ofen (2015).

Participants were informed that they would participate in two unrelated studies. In the first study, they were asked to elaborate on the importance of different factors in how

people make consumption and purchasing decisions in the two questions, “Please think about the times in your life where you attempted to be different from other people and stand out from the rest. In your own words, please write about the importance of individuality (being different from others) as well as the benefits of standing out from the rest [similar to other people and not stand out from the rest. In your own words, please write about the importance of conformity (being similar to others) as well as the benefits of blending in with the rest]” and “Please describe a recent situation in which you attempted to stand out or be different from others. What did you do to be different from others and stand out (e.g., doing something that most people would not do or choose a color that is very uncommon)? [not to stand out or be similar to others. What did you do to be similar to others and not stand out (e.g., doing something that most people would do or choose a color that is very common)?].” In the second study, they were asked to indicate their brand choice (established vs. young brand) for one of the product categories (chocolate vs. VR headset) to which they are assigned and list their thoughts while making a choice.

Next, they were asked to rate the importance of each brand trait while making their choice using stability with three items (responsible, stable, loyal, $\alpha = .65$), dynamism with three items (trendy, dynamic, creative, $\alpha = .71$), and carelessness with two items (careless, irrelevant, $r = .67$). After rating importance of brand traits, they were asked to indicate their perceptions of product category innovativeness with three items, CNFU (31 items, $\alpha = .97$), and two items of manipulation check of uniqueness (“I chose a brand that makes me stand out from other people”, “I chose a brand that makes me be

similar to other people,” $r = .055, p = .220$). The survey was terminated after asking participants’ demographic information.

Results

Checks

A $2 \times 2 \times 2$ ANOVA on perceptions of product category innovativeness revealed only a main effect of product category as participants rated virtual reality headset as a more innovative product category than chocolate (M 's = 5.72 vs. 4.28; $F(1, 496) = 164.23, p < .001, \eta_p^2 = .25$). No other effects were significant (all p 's $> .191$).

A $2 \times 2 \times 2$ ANOVA on perceptions of uniqueness (e.g., stand out from other people) did not show a significant difference between high-uniqueness participants and low-uniqueness participants (M 's = 4.24 vs. 4.04; $F(1, 496) = 1.61, p = .206$). No other effects were significant (all p 's $> .152$). In addition, a $2 \times 2 \times 2$ ANOVA on perceptions of uniqueness (e.g., similar to other people) did not show a significant difference between high-uniqueness participants and low-uniqueness participants (M 's = 3.92 vs. 3.89; $F(1, 496) = 0.03, p = .863$). No other effects were significant (all p 's $> .167$). The analyses failed to confirm our uniqueness manipulation and did not reveal any significant effects of uniqueness manipulation on brand choice (all p 's $> .634$). The following analyses are thus aggregated over the two uniqueness conditions.

Brand Choice

Due to the failure of uniqueness manipulation, we focused on analyzing the effect of the measured individual differences on the need for uniqueness. A logistic regression with brand choice (young = 1, old = 0) as the dependent variable and product category, presentation order, CNFU, the three two-way interactions, and the three-way interaction

as the independent variables revealed a significant two-way interaction between product and presentation order ($\beta = 3.25$, $SE = 1.34$, $Wald \chi^2 = 5.91$, $Exp(\beta) = 25.68$, $p = .015$), a significant three-way interaction ($\beta = -0.90$, $SE = .32$, $Wald \chi^2 = 7.81$, $Exp(\beta) = 0.41$, $p = .005$), and no other significant effects (all p 's $> .093$). To be specific, the two-way interaction revealed that the younger (vs. established) brand preference was significantly higher in the virtual reality headset category than in the chocolate category in both cases where Brand A was an established brand ($\beta = 1.88$, $p < .001$) and Brand A was a young brand ($\beta = 1.68$, $p < .001$). There were no significant effects of presentation order for both chocolate ($p = .666$) and VR ($p = .200$).

The three-way interaction revealed that no effects were significant when Brand A was an established brand (all p 's $> .110$). However, when Brand A was a young brand, the analyses revealed a significant effect of product category as preference for the younger (vs. established) brand was significantly higher in the virtual reality headset category (57.3%) than in the chocolate category (20%; $\beta = 4.64$, $SE = 1.01$, $Wald \chi^2 = 21.12$, $Exp(\beta) = 103.46$, $p < .001$) and a significant effect of CNFU ($\beta = 0.63$, $SE = 0.20$, $Wald \chi^2 = 10.39$, $Exp(\beta) = 1.88$, $p = .001$). The main effects were qualified by a significant interaction between product category and CNFU ($\beta = -0.77$, $SE = 0.24$, $Wald \chi^2 = 10.31$, $Exp(\beta) = 0.46$, $p < .031$), supporting Hypothesis 1.

Importance of Brand Personality

Hayes' (2017) parallel multiple mediator test (PROCESS 4) with brand choice as the dependent variable, product category as the independent variable, and the importance for the personality dimensions of stableness, dynamism, and carelessness as parallel multiple mediators, showed that the indirect effect of product category innovativeness on

brand choice was significant through the importance of stableness (indirect effect: $\beta = -0.21$, SE = .09, CI 95% = [-.413, -.065]) and dynamism (indirect effect: $\beta = 0.61$, SE = .15, CI 95% = [.359, .957]), but not carelessness (indirect effect: $\beta = -0.02$, SE = .03, CI 95% = [-.096, .023]). The total indirect effect was also significant (total indirect effect: $\beta = 0.37$, SE = .13, CI 95% = [.154, .643]).

Discussion

Study 2 demonstrates that preferences for the younger brand were higher in the virtual reality headset category, which was perceived to be higher in innovativeness compared to the preferences for the established brand in the chocolate category. The positive relationship between perceptions of product category innovativeness and preferences for younger brands is mediated through brand personalities that individuals perceive as important in making brand choices. Therefore, the result strongly suggests that consumers rely on age stereotypes in forming impressions of brand personality, which then influence brand preferences.

The results of Study 2 did not identify the presence of a moderating effect of uniqueness manipulation. These findings reveal the measured individual differences in the need for uniqueness. The positive relationship between perceptions of product category innovativeness and preference for younger (vs. established) brands is moderated by the consumers' measured need for uniqueness. The effects are stronger for those with low need for uniqueness relative to those with high need for uniqueness. However, we acknowledge that we cannot rule out presentation order effects in Study 2.

General Discussion

Across these two studies, we have demonstrated the effects of perceptions of product category innovativeness and consumer traits, such as novelty seeking and need for uniqueness, on consumers' preference for young versus established brands. Although perceptions of product category innovativeness have a positive impact on consumer preferences for young brands, this effect is moderated by novelty seeking and the need for uniqueness. The findings of this research reveal that consumers who seek novelty and those who have a high need for uniqueness tend to prefer young brands, regardless of perceptions of product category innovativeness. However, consumers who are less likely to seek novelty and those who have a low need for uniqueness tend to prefer young brands when perceptions of product category innovativeness are high; when perceptions of product category innovativeness are low, such consumers prefer established brands.

This work contributes to the existing literature in three ways. First, this research demonstrated that consumer preferences for a relatively young brand increased with perceptions of product category innovativeness. The limited research on the effects of brand age and brand heritage, however, suggests that perceptions of quality and purchase intentions are higher for established brands, suggesting that *old is gold* (e.g., Desai et al. 2008). This research shows a contingent perspective on the effects of brand age and identifies conditions under which younger brands may be preferred to established brands, particularly when brand names are relatively unfamiliar and the other intrinsic cues may be similar.

Second, by extending the findings from Essay 2, the findings in Essay 3 bolster support for the effects of brand personalities which mediate the positive relationship

between perceptions of product category innovativeness and preference for younger (vs. established) brands. To strengthen the hypothesis, we analyzed the effects of brand personalities in two ways: the difference in brand personalities describing the brands (Study 1) and the extent to which the brand personality is important in making brand choices (Study 2). Given that the personality of established brands matches that of product categories perceived to be stable or low in innovativeness, whereas the personality of younger brands matches that of product categories perceived to be dynamic or high in innovativeness, consumers prefer established (vs. younger) brands when perceptions of product category innovativeness are low (vs. high).

Third, our results also contribute to previous literature on the need for uniqueness. Previous research has shown that consumers with a high need for uniqueness strategically adopt distinctive choices or products by focusing on innovation and the desire to preserve uniqueness in communication (Cheema and Kaikati 2010; Moldovan et al. 2015). We extend this research by showing that the relationship between perceptions of product category innovativeness and young brand preference differs according to consumers' individual traits, need for uniqueness, and desire to seek novelty.

These findings have important marketing contributions. Our research identifies conditions under which younger brands will be preferred over established brands. As such, this research suggests that younger brands should build their marketing strategies to attract consumers who want to differentiate themselves or are seeking something novel.

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APPENDIX A

ESSAY 1 STUDY 1: MEASUREMENT ITEMS

Measurement items

Willingness to use a reward card

How likely is it that you would visit Green Café and use the reward card (1=*Definitely would not* to 7=*Definitely would*)?

Is Green Café's goal to decrease waste desirable? (1 = *Strongly disagree* to 7 = *Strongly agree*)

Perceived impact of participation ($\alpha = .90$)

To what extent does getting one stamp make you feel that you are making progress toward getting one free drink (1=*Not at all* to 7=*Very much*)?

How much progress would be using your own mug make toward the Green Café Waste Reduction Drive (1=*Not at all* to 7=*Extremely*)?

How big would your contribution be toward the Green Café Waste Reduction Drive if you purchased a drink using your own mug (1=*Not at all* to 7=*Extremely*)?

How substantial would your contribution be toward the Green Café Waste Reduction Drive if you purchased a drink using your own mug (1=*Not at all* to 7=*Extremely*)?

The participation of each additional person will have a significant effect on the likelihood of a successful drive (1=*Strongly disagree* to 7=*Strongly agree*).

My participation will have a significant effect on the likelihood of a successful drive (1=*Strongly disagree* to 7=*Strongly agree*).

Feelings of helping one's own community

To what extent does getting one stamp make you feel that you are helping your community (1=*Not at all* to 7=*Very much*)?

Willingness to bring one's own mug

How likely is it that you would bring your own mug to Green Café in order to earn a stamp (1=*Definitely would not* to 7=*Definitely would*)?

Brand liking ($\alpha = .92$)

I like the brand Green Café (1=*Strongly disagree* to 7=*Strongly agree*).

I admire the brand Green Café (1=*Strongly disagree* to 7=*Strongly agree*).

I feel like Green Café fits in my life (1=*Strongly disagree* to 7=*Strongly agree*).

Feelings of helping the environment

To what extent does getting one stamp make you feel that you are helping the environment (1=*Not at all* to 7=*Very much*)?

Evaluation of success for the goal ($\alpha = .76$ in Study 1, $\alpha = .80$ in Study 2)

To what extent do you trust Green Café to efficiently reduce its waste (1=*Not at all* to 7=*Very much*)?

To what extent does the progress of the Green Café Waste Reduction Drive thus far seem satisfying (1=*Not at all* to 7=*Extremely*)?

How likely is it that Green Café will reach its goal of eliminating 10,000 cups' worth of waste (1=*Not likely* to 7=*Certainly*)?

APPENDIX B

ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 1

Antecedent		Consequent						
		<i>M</i> (Perceptions of goal desirability)			<i>Y</i> (Willingness to use a reward card)			
		Coeff.	<i>SE</i>	<i>p</i>		Coeff.	<i>SE</i>	<i>p</i>
<i>X</i> (Progress framing)	a_1	-1.309	0.446	.004	c'_1	-0.017	0.177	.923
	<i>M</i>	—	—	—	<i>b</i>	0.578	0.089	< .001
<i>W</i> (Political affiliation)	a_2	0.194	0.186	.297	c'_2			
	$X \times W$	a_3	0.711	0.254	.006			
Constant	i_M	6.222	0.330	< .001	i_Y	1.878	0.600	.002
				$R^2 = 0.103$				
				$F(3, 260) = 9.918, p < .001$	$R^2 = 0.139$			
					$F(2, 261) = 21.034, p < .001$			

APPENDIX C

ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 2

Antecedent		Consequent						
		<i>M</i> (Perceived impact of participation)			<i>Y</i> (Willingness to use a reward card)			
		Coeff.	<i>SE</i>	<i>p</i>		Coeff.	<i>SE</i>	<i>p</i>
<i>X</i> (Progress framing)	a_1	-1.461	0.595	.015	c'_1	-0.011	0.161	.944
	<i>M</i>	—	—	—	<i>b</i>	0.649	0.064	< .001
<i>W</i> (Political affiliation)	a_2	-0.456	0.248	.068	c'_2			
	$X \times W$	a_3	0.791	0.338	.020			
Constant	i_M	5.539	0.440	< .001	i_Y	2.578	0.324	< .001
				$R^2 = 0.023$				
				$F(3, 260) = 2.021, p = .111$	$R^2 = 0.286$			
					$F(2, 261) = 52.196, p < .001$			

APPENDIX D














ESSAY 1 STUDY 1: MODERATED MEDIATION RESULT 3

Antecedent		Consequent						
		<i>M</i> (Feelings of helping the community)			<i>Y</i> (Willingness to use a reward card)			
		Coeff.	<i>SE</i>	<i>p</i>		Coeff.	<i>SE</i>	<i>p</i>
<i>X</i> (Progress framing)	<i>a</i> ₁	-2.018	0.814	.014	<i>c</i> ' ₁	-0.087	0.166	.600
	<i>M</i>	—	—	—	<i>b</i>	0.437	0.048	< .001
<i>W</i> (Political affiliation)	<i>a</i> ₂	-0.539	0.339	.114	<i>c</i> ' ₂			
	<i>X</i> × <i>W</i>	<i>a</i> ₃	1.189	0.463				
Constant	<i>i</i> _{<i>M</i>}	5.344	0.602	< .001	<i>i</i> _{<i>Y</i>}	3.737	0.243	< .001
				<i>R</i> ² = 0.026				
				<i>F</i> (3, 260) = 2.267, <i>p</i> = .081	<i>R</i> ² = 0.243			
					<i>F</i> (2, 261) = 41.877, <i>p</i> < .001			

APPENDIX E

ESSAY 2 STUDY 1: PRODUCT CATEGORIES AND BRAND AGE

MANIPULATION

1. Home security camera		Brand A Since 1987	Brand B Since 2015
2. Virtual reality headset		Brand A Since 2002	Brand B Since 2018
3. Robotic vacuum cleaner		Brand A Since 1997	Brand B Since 2016
4. Smart speaker		Brand A Since 2010	Brand B Since 2018
5. Anti-aging formula skincare		Brand A Since 1938	Brand B Since 2016
6. High tech sportswear		Brand A Since 1993	Brand B Since 2017
7. Eco-friendly dishwasher detergent		Brand A Since 1960	Brand B Since 2015
8. Dried tea leaves		Brand A Since 1876	Brand B Since 2006
9. Leather gloves		Brand A Since 1930	Brand B Since 2015
10. Professional stainless-steel kitchen knife		Brand A Since 1927	Brand B Since 2009
11. Oakwood storage drawer		Brand A Since 1901	Brand B Since 2014
12. Box of chocolates		Brand A Since 1942	Brand B Since 2011
13. Table runner		Brand A Since 1916	Brand B Since 2010

APPENDIX F

ESSAY 2 STUDY 1: REPRESENTATIVE STIMULUS – VIRTUAL REALITY

HEADSET

Product Category

VIRTUAL REALITY (VR) HEADSETS

If you were shopping for virtual reality (VR) headsets, which brand would you choose to purchase?



Brand A

Since 2002



Brand B

Since 2018



APPENDIX G

ESSAY 2 STUDY 3: PRODUCT CATEGORY INNOVATIVENESS MANIPULATION

Low innovativeness condition

HARDSIDE SPINNER TRAVEL SUITCASE

Features:

- A solid hard-shell polycarbonate body with four double spinner wheels. Ideal for 3- to 5-day trips.
- Fully lined interior with divider. Expandable for up to 15% additional capacity.
- Telescopic retractable top and side handles.
- Quick access top pocket for storing travel essentials.



High innovativeness condition

SMART AUTO-FOLLOW TRAVEL SUITCASE

Features:

- A solid hard-shell polycarbonate body with four double spinner wheels. Ideal for 3- to 5-day trips.
- Smart suitcase integrates intelligent laser following technology with machine vision AI technology to identify owner and start following on its own.
- Distance alarm system and digital scale to check weight through a smartphone.
- GPS tracker and LTE/5G technology that locates the suitcase anywhere in the world.



APPENDIX H

ESSAY 2 STUDY 4: PROCESSING SPEED MANIPULATION

Fast processing condition

Fast is Accurate

Recent psychological research has shown that people make better choices when they decide quickly and effortlessly. A quick response leads to making the best choice possible. It is important to go with your first reaction or feelings. Therefore, for the next question, a quick response time will be critical.

We ask you to take as little time as possible to think quickly about your choice, and then respond. Quickly consider the options and immediately make your selection.

(Please click below before proceeding to the selection task)

Slow processing condition

Slow is Accurate

Recent psychological research has shown that people make better choices when they take more time and effort. Taking your time leads to making the best choice possible. It is important to think over things carefully. Therefore, for the next question, a slow response time will be critical.

We ask you to take as much time as needed to think carefully about your choice, and then respond. Fully consider the available options before making your selection.

(Please click below before proceeding to the selection task)

APPENDIX I

ESSAY 2 STUDY 5: ENTITY AND INCREMENTAL IMPLICIT THEORY

MANIPULATION AND BRAND TAGLINES

Entity implicit theory condition

Personality, Like Plaster, Is Pretty Stable Over Time

In his talk at the American Psychological Association's annual convention held at Washington D.C. in August, Dr. George Medin argued that “in most of us, by the age of ten, our character has set like plaster and will never soften again.” He reported numerous large longitudinal studies which show that people age and develop, but they do so on the foundation of enduring dispositions that was set at a very young age.

Incremental implicit theory condition

Personality Is Changeable and Can Be Developed

In his talk at the American Psychological Association's annual convention held at Washington D.C. in August, Dr. George Medin argued that “no one’s character is hard like a rock that cannot be changed. Only for some, greater effort and determination are needed to effect changes.” He reported numerous large longitudinal studies which show that people can mature and can change their character. He also reported research findings showing that people’s personality characteristics can change even in their late sixties.

Stereotype inconsistent brand taglines of dried tea leaves

<p>Brand A (Established in 1876) <i>“144 Years of Constant Innovation”</i></p>	<p>Brand B (Established in 2006) <i>“Staying True to Its Roots”</i></p>
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Stereotype inconsistent brand taglines of home security camera

<p>Brand A (Established in 1987) <i>“33 Years of Constant Innovation”</i></p>	<p>Brand B (Established in 2015) <i>“Staying True to Its Roots”</i></p>
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APPENDIX J

ESSAY 2 STUDY 6: STEREOTYPE CONSISTENT AND STEREOTYPE

INCONSISTENT BRAND TAGLINES

Stereotype consistent brand taglines of chocolates

<p>Brand A (Established in 1942)</p> <p><i>“At Brand A, we are committed to unwavering consistency. We constantly ask ourselves how our rock-solidness can fit your lifestyle.”</i></p>	<p>Brand B (Established in 2011)</p> <p><i>“At Brand B, we are committed to innovation. We constantly ask ourselves how we can adapt to fit your evolving lifestyle.”</i></p>
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Stereotype inconsistent brand taglines of chocolates

<p>Brand A (Established in 1942)</p> <p><i>“At Brand A, we are committed to innovation. We constantly ask ourselves how we can adapt to fit your evolving lifestyle.”</i></p>	<p>Brand B (Established in 2011)</p> <p><i>“At Brand B, we are committed to unwavering consistency. We constantly ask ourselves how our rock-solidness can fit your lifestyle.”</i></p>
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Stereotype consistent brand taglines of virtual reality headset

<p>Brand A (Established in 2002)</p> <p><i>“At Brand A, we are committed to unwavering consistency. We constantly ask ourselves how our rock-solidness can fit your lifestyle.”</i></p>	<p>Brand B (Established in 2018)</p> <p><i>“At Brand B, we are committed to innovation. We constantly ask ourselves how we can adapt to fit your evolving lifestyle.”</i></p>
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Stereotype inconsistent brand taglines of virtual reality headset

<p>Brand A (Established in 2002)</p> <p><i>“At Brand A, we are committed to innovation. We constantly ask ourselves how we can adapt to fit your evolving lifestyle.”</i></p>	<p>Brand B (Established in 2018)</p> <p><i>“At Brand B, we are committed to unwavering consistency. We constantly ask ourselves how our rock-solidness can fit your lifestyle.”</i></p>
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